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Power of Myths in Energy Transition

Unveiling Timeless Mythologies in Finnish Energy Agora

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Julkaisun nimike
Myytit energiamurroksessa: ajattomien mytologioiden voima suomalaisessa energia-agorassa

Tiivistelmä
Kestävä energiamurros on globaali haaste. Perinteisten tuotanto- ja kulutussuuntausten murroksia hidastavat erilaiset polkuriippuvuudet ja ns. lukkotilanteet. Myös asenteiden ja käyttäytymisen välillä oleva kuilu vaikeuttaa muutosta kohti kestävämpää kehitystä. Jotta ymmärtäisimme paremmin sosio-kulttuuristen tekijöiden ja murrosajureiden vaikutuksia, tarvitaan makromarkkinoinnin systeemistä näkökulmaa. Tämän vuoksi väitöskirjassa rakennetaan monitieteinen energia-agora-lähestymistapa. Agora nähdään 'vanhan kansan torina', jossa sosio-teknillisen markkinasysteemin eri toimijat tulkkaavat mielikuviaan toisille. Tämä lähestymistapa mahdollistaa mikro-, meso- ja makrotasojen toimijuuksien samanaikaisen ja systeemisen tarkastelun. Väitöskirjassa tarkastellaan sitä, miten institutionaalisesti legitimoidut uskomukset vaikuttavat kestäviin polkuvalintoihin. Diskurssianalyysin keinoin tarkastelun kohteeksi on valittu Suomen energia-agorasta löytyviä institutionaalis-myyttisiä juonia. Tulokset osoittavat, että agoran eri tasoilta löytyy samankaltaista ajatusmalleja, jotka muodostavat kolme energiatodellisuutta: *Perinteinen malli*, *Murrosmalli* sekä *Ilmastohätämalli*. Nämä todellisuudet taistelevat vallasta energia-agorassa noudattamalla juonia, joita kutsutaan rationaalisiksi energiamyyteiksi. Tutkimuksessa tunnistettiin viisi tällaista myyttiä: *Kivenkova*, eli romanttinen myytti, joka elää mieluummin menneessä; *Isoveli*, eli ironinen myytti, joka hyväksyy murroksen mutta ei luota ratkaisuihin ensikädeltä; *Älykäs & Joustava*, eli koominen myytti, joka uskoo teknologiseen evoluutioon; *Ruraali Resilienssi*, eli satiirinen myytti, joka pilkkaa murrosvisioita; *Globaali Kylä*, eli traaginen myytti, joka näkee ihmiskunnan tuhoavan itsensä omalla käyttäytymisellään. Empiiriset löydökset tukevat väitettä siitä, että nk. myyttinen työskentely omaa markkinoita muokkaavaa voimaa. Toimijat ylläpitävät dominoivia myyttejä omissa ajatusmalleissaan ja uskomuksissaan tulkaten näitä agoran toisille toimijoille. Näin syntyvät polkuriippuvuudet ovat juurtuneet kulttuurisidonnaisiin syviin uskomuksiin, jotka taas ammentavat voimansa ajattomista mytologioista.

Asiasanat
Energiamurros, kestävä kehitys, sosiaalinen paradigma, myytit, mytologiat, markkinointi systeemi, polkuriippuvuus, lukkotilanne, ajatusmallit, diskurssit

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Abstract
Shifts in the traditional production and consumption trajectories towards zero emission, sustainable societies are hampered by path dependence and lock-ins. In addition, the notion of value-action gap indicates that people's actions do not reflect their sustainability intentions. Therefore, there is a call for more Macromarketing systems understanding about socio-cultural-cognitive factors affecting transition dynamics. This thesis takes a multidisciplinary approach and introduces the energy agora framework. The agora is a place where actors in a socio-technical energy marketing system translate their ideations to others. The agora approach enables a micro, meso, macro systems perspective on path dependence as mental models, and the exploration of how institutionally legitimized beliefs affect (un)sustainability trajectories. Discourse analysis is used as method, and the process of institutionalization as translation is followed, to capture mythical plots circulating in the Finnish energy agora. Findings show that similar mental models exist across the energy agora, forming three energy realities: Traditional, In Transition and Climate Emergency. These realities compete in the energy agora following distinct plots presented as five rational energy myths: The Rock Solid, a romance myth that lives in the nostalgia of preferring the past; Big Brother, an ironic myth that accepts change but does not trust appearances; Smart & Flexible, a comic myth that believes in the technological evolution; Rural Resilience, a satiric myth that makes fun of transition visions; Global Village, a tragedy myth that sees mankind doomed by their actions. The empirical findings of this thesis suggest that so called mythical work has marketing system shaping power. Actors carry myths along in transition processes as their mental models translated to others through mythical plots. Understanding the mythological roots of the cultural-cognitive landscape of system actors might provide a key to unlock path dependence, and break the dominant social paradigm loop.

Keywords
Energy transition, Sustainability, Dominant Social Paradigm, Myths, Mythologies, Marketing System, Path Dependence, Mental models, Discourses

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Petra Berg

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Abbreviations

CCT	Consumer Culture Theory
DSO	Distribution System Operator
DSP	Dominant Social Paradigm
MLP	Multi-Level Perspective
NEP	New Environmental Paradigm
TCR	Transformative Consumer Research
TSO	Transmission System Operator

Glossary of terms

Agora Ancient gathering place (town square), the central public space in ancient Greek city-states.

Antrophocene Epoch is characterized as the time in which the collective activities of human beings began to substantially alter Earth's surface, atmosphere, oceans, and systems of nutrient cycling. Argued by researchers that it should begin 1950.

Cleantech Technology that makes it possible to reduce harm on the environment

Dominant Social Paradigm Refers to the collection of norms, beliefs, values, habits, and so on that form the world view most commonly held within a culture, and has been evolving in the West since the Enlightenment.

Energy Mix A group of different primary energy sources from which secondary energy for direct use, such as electricity, is produced.

Greentech Green technology, also called environmental technology.

Institutionalization as translation An interaction that involves negotiation between various parties, and the reshaping of what is finally being transmitted.

Institutional Work An intentional effort or action by an actor that may shape an institution or social structure or maintain a given situation.

Lock-In of Mental Models Thought models that lock us into mindsets and behaviors that create inertia for change e.g. path dependence.

Macro-level actors; people in 'powerful roles' associated with states, governments, public agencies, politicians, policy-makers, bureaucrats, local governments and sub-governmental organizations. Also high-level industry and economic leaders.

Marketing Systems Multi-level, path dependent, dynamic exchange systems, embedded within a social matrix, and interacting with institutional and knowledge environments.

Materialism Material- and continuous economic growth are seen as necessities for a well-being society - builds on a notion of infinite growth in an infinite system.

Mental Model An explanation of how something works, such as a concept, framework or worldview that you carry around in your mind.

Meso-level actors Regional decision makers, politicians, business people, researchers, innovators, consultants, NGO's, project leaders as well as prosumers (also niche actors).

Micro-level actors Citizens, consumers, prosumers.

Multi-Level Perspective A transition framework positing that transitions come about through interaction processes within and among three analytical levels: niches, socio-technical regimes and a socio-technical landscape

Mythology The study and interpretation of often sacred tales or fables of a culture known as myths or the collection of such stories which deal with various aspects of the human condition.

New Environmental Paradigm The view that humans represent only one among many species on Earth, that human activities are determined by the environment as well as by social and cultural factors, and that humans are strongly dependent upon the environment and its resources.

Myths Express the beliefs and values about mythological subjects held by a certain culture.

Path Dependence A phenomenon whereby history matters; what has occurred in the past persists because of resistance to change.

Rational Energy Myth Tell us about how current energy realities are structured and the plots followed by actors telling them.

Social Paradigm Consists of the institutions, values and beliefs that provide the lens through which members of society view and interpret the world and also steers the interest towards what is considered important.

Socio-Technical Energy System Involve not only machines, refineries and devices but also the humans who design, use and shape them.

Sustainability Transition Radical transformation towards a sustainable society as a response to a number of persistent problems confronting contemporary modern societies.

Essays

Essay I:
Von Koskull, C., Berg, P. & Gummerus, J. (2018). "Wrath in consumer oppositional activism". In Syrjälä, Henna & Leipämaa-Leskinen, Hanna (Eds.). *Seven deadly sins in consumption*. Edward Elgar Publishing.

Essay II:
Berg, P., Narayan, R. & Rajala. A. Exploring New Business Opportunities in Energy Sector - Network Configurations for Sustainable Energy Marketing Systems

Presented in:
International Sustainability Transitions (IST) 2019 Conference, Ottawa, Canada

Essay III:
Berg, P. Market Shaping Energy Myths

Presented in:
Macromarketing Conference 2019, Cleveland, Ohio, USA

1 INTRODUCTION

Risks to human welfare and quality of life that are associated with global warming, environmental pollution and biodiversity loss, have been acknowledged and part of global discussion for more than half a century. Rachel Carson's book Silent Spring was published in 1962, bringing the public attention to the effects of pesticides onto the ecosystem and human welfare. Carson's book played an important role in starting environmental and the deep ecology movements. Another important step was the Club of Rome founded in 1968 to address the multiple crises facing humanity and the planet. In 1972 their report 'Limits to growth', alerted the world to the consequences of unsustainable interactions between human systems and health of the planet. The Brundtland commission was created in 1983 to focus on environmental and developmental challenges and solutions. Their report, 'Our common future' influenced the coming UN earth summits and gave a definition to sustainable development. In 2015, the 17 Sustainable Development Goals (SDGs) were adopted by all UN member states to be achieved by 2030. The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 by UN Environment programme (UNEP) and The World Meteorological Organization (WMO) to provide policymakers with knowledge about climate change.

The sustainability actions mentioned above are some of the key global milestones from the last 50 years. As we can see, there has been years of grassroots movements, international collaboration, important meetings and pacts. The expectations for the outcome of these collective efforts on bettering the well-being of planet earth could be quite high. Sadly, the last years have served us with heavy reality checks: The IPCC 2018 special report alerted nations that we are far from the 1.5 °C target which was signed in the COP21 Paris Climate Agreement. Following current and planned policies, the world would exhaust its energy-related carbon budget (CO2) in under 20 years to keep the global temperate rise to well below 2 C (with 66% probability), while fossil fuels such as oil, natural gas and coal would continue to dominate the global energy mix for decades to come (IRENA 2018). The 2019 Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) report, shows an 'unprecedented accelerated loss' of biodiversity, with around 1 million animal and plant species directly threatened with extinction. During these last years, these reports have been accompanied by intensified natural catastrophes such as heavy flooding, mudslides, wildfires, hurricanes and melting of the Siberian permafrost. Since beginning of 2020, the COVID19 virus has managed to halt the entire globe, and is still doing so, as I am finalizing writing this thesis in March 2021. During the last years, the world has also seen a growing

number of grassroots movements and activism such as the Extinction Rebellion, Animal Rebellion, Greta Thunberg and Fridays for Future taking to the streets and Internet. There is a global outcry of planetary emergence and it is getting louder. Simultaneously, the pandemic has affected the global economies heavily and there are concerns about how, or whether re-vitalizing economies and working towards sustainability goals will go hand in hand. The energy transition towards carbon neutral energy systems is a central piece in solving the sustainability puzzle.

1.1 Study background: Sustainability energy transition – a Macromarketing systems perspective

Central to the sustainability challenges and directly linked to climate warming, is the global energy production and consumption. There is a need for a rapid sustainable transition (Varey 2012, McDonagh and Prothero 2014, Kemper and Ballantine 2019) where renewable energy plays a central role (Claudy et al, 2013, Markard et al, 2012, Köhler et al, 2019). Still, renewable energy has been tapped only to a small fraction of its potential, even though the technological development and the economic viability for many applications are in place (Painuly 2001, Verbong and Geels 2007). Research on barriers to diffusion and adoption of renewable energy, identifies key macro- and meso level, systemic problems such as the lack of stable institutions (Negro et al, 2012), stable long term energy planning (Elefthearidis and Anagnostopolou 2015), cohesive and integrated policy (Michalena and Hills 2102) and cost barriers (Painuly 2001). Transformations towards sustainable renewable energy systems are challenging, as literally all economic processes depend on the current 'fossil market' (Negro et al, 2012) and there are many different interests at stake (Schreuer et al, 2012, Stirling 2014). The energy transition challenge can be described as a wicked problem (Kemper and Ballantine 2017) that requires system wide interventions.

Lately, EU has put the energy citizen at the center of the energy transition and the citizen is expected to take the forefront in making responsible choices. Marketing research show that consumers are increasingly aware of sustainability issues; sustainability it is considered as a new megatrend (Prothero et al, 2011, Varey 2012) and most people are interested in ways to reduce their carbon footprint and environmental impact (White et al, 2019). Still, sustainability initiatives seem to lack long term effectiveness or efficiency and most consumers end up continuing their usual habits. The notion of the 'Green gap' or value-action gap is (in) famous, indicating that consumers receive information and have favorable attitudes towards sustainable consumption, but their actions do not reflect these good intentions (Black 2010, Gifford 2011, McDonald et al, 2012, Claudy 2013, Melea et

al, 2014). This difference, the so-called green-gap, seems to concern consumers' energy behavior as well (Negro et al, 2012, Kaenzig et al, 2013).

From the micro, consumer level viewpoint there is a transformation from the usual "plug-in, receive electricity and pay your bills" inertia (Verbong and Geels 2007) to more information and choices being available (Späth and Rohracher 2010, Kaenzig et al, 2013). Research addresses how to bridge "energy gaps" by studying consumer adoption of renewable energy technology (Thørgesen 2005, Thørgesen and Noblet 2012, Hyysalo et al, 2013, Juntunen 2014) and energy practices (Gram-Hanssen 2013, Jalas and Rinkinen 2016). The results show that there are various factors affecting individual energy behavior: Green values, education, routines, time, availability of technology and information not to forget pricing issues (which are the most salient). Recent research also suggests that consumer choices favoring sustainability are best supported by including a variety of factors that influence the social, habitual, individual, feelings/cognition and tangibility spheres. This has been called the SHIFT framework developed by White et al., (2019). This applies to energy behavior as well, and it has been shown that it is best influenced by using so called tailored, socio-technical approaches, where technological and cognitive factors are targeted simultaneously instead of separately (Steg et al, 2018, Abrahamse et al, 2018). Using such approaches, means that there is a need for practitioners, e.g. marketers, policy makers and nonprofits (White et al, 2019) who use these tools. Thus, it becomes clear that energy consumption is embedded in a larger consumption system (Scott et al, 2014), where the socio-culturally constructed belief-systems plays an important role on behavioral, socio-material outcomes (Humphreys 2014, Yngfalk 2019).

1.1.1 Macromarketing systems perspective

It can be argued, that bridging the sustainability attitude/behavior gap (McDonagh and Prothero 2014) and transforming consumers' energy behavior towards sustainability cannot simply be estimated and influenced by targeting consumer attitudes, motives and intentions towards sustainability, but by recognizing the individual's embeddedness in a larger social fabric (Dowd et al, 2012, Kilbourne and Middlestaedt 2012, Claudy et al, 2013, Hall 2018). Consumption regarded as a socially constructed process considers that people are socialized into consumption systems and therefore, it is hard to grasp a holistic and sophisticated understanding of sustainability and make coherent, consistent decisions from an external point of view (McDonald et al, 2012). The notion of the rational consumer is challenged (McDonagh and Prothero 2014). More so, there is a call for changing focus from the responsibilized consumer (Giesler and Veresiu

2014), to more importantly acknowledging the responsibility of the state and corporations in implementing policy changes to solve environmental and social problems (Humphreys and Thompson 2014 and Yngfalk 2019). Elaborating further on this logic, the "freedom of choice and responsibility for it" of consumers is said to exist within the context of the dominant social paradigm (DSP), the system into which an individual has been socialized (Kilbourne et al, 2009).

A dominant social paradigm (DSP) consists of the institutions, values and beliefs that provide the lens through which members of society view and interpret the world (Pirages and Erlich 1974). That means it also steers the collective interest towards what is considered important as referred by Kilbourne and Mittelstaedt (2012: 289): "*The orientation toward consumption is commonly referred to as materialism and it has been argued that the global spread of materialism (Stiglitz 2002) is unsustainable (Daly 1996) and threatening the well-being of citizens individually, socially, and ecologically around the world" (Ger 1997, Kilbourne 2004).* Thus, as basic values and habits are mostly taken for granted, it is hard for people to grasp the material trap built into the system, which acts as an effective barrier for a bigger systemic transformation and adopting green consumerism (McDonagh et al, 2014). Critique towards the unsustainability of consumption culture is therefore to be viewed in relation to the production side and the productivist discourse (Scott et al, 2014, McDonagh 2017). There is a need for a New Environmental Paradigm (NEP) (Dunlap 2008), this nature focused paradigm sees our planet as a spaceship with limited resource, a fragile eco-system with boundaries that need to be respected. Because of the importance of institutional structures both in the social and material (socio-technological) spheres in the context of energy transition, systems thinking is needed to grasp the complexity inherent to transitions.

Energy transition can be described as a multilevel shift from one socio-technical system to another (Verbong and Geels 2007, Geels 2010). These systems transitions are called socio-technical, because they include new technologies and the markets with user practices, policy and cultural meanings (Sarrica et al, 2016). The multi-level perspective (MLP) approach (Geels 2004) offers an overarching view of the dynamics leading to a structural change of a socio-technological system. It stresses that socio-technical systems change through interplay between landscape, regime and niche level processes (Geels and Schot 2007). Socio-technical energy systems are highly path dependent because of the tight connection to technological development and embeddedness into institutional structures. This refers to production, distribution and consumption being interdependent, as well as based upon certain logics in the knowledge (expertise) base and infrastructure (Berninger et al, 2017). Sustainable innovations are often

more of the social kind, as technological solutions are reaching a level where sustainability is available (Markard et al, 2012). It is argued that the existence of strong, socio-technical path dependencies slows down the pace of energy transition too much to be able to solve the sustainability challenges. To avoid unsustainable path dependencies and lock-ins (Antal et al, 2020), reflexive modes of governance and planning processes are called for (Smith and Stirling 2010, Kivimaa et al, 2019). Myopia (short sightedness) in transitions refers to the risk of people getting lost in the system e.g. not seeing the forest for the trees (Shove and Walker 2007). Myopia also relates to the notion of bounded rationality, and it is considered an unavoidable part of transition processes. At the same time providing evidence-based arguments is considered crucial for the cognitive framing and progressive narrative of the same processes. In other words, there will always be bias in one way or another (Meadowcraft 2011). In transition research it is also argued that transition comes about as a result of the process of structuration. That means institutions posing opportunities and constraints to system actors as well as shaping and being shaped by their logics (Brown et al, 2013). Thus the sustainability transition literature recognizes institutional barriers to actors in the MLP (Geels 2020) as well as institutional work being undertaken by actors (Brown et al, 2013, Fuenfschilling and Truffer 2014)

The antecedent heterogeneity tradition in Macromarketing (Mittelstaedt et al, 2006, Kadirov et al, 2016) recognizes the role of the broader institutional environment in the formation of marketing systems (Layton 2007) or the "*written and unwritten rules, norms and constraints that humans device to reduce uncertainty and control their environment*" (Menárd and Shirley 2005 in Kadirov et al, 2016: 54). In macromarketing research, markets are recognized as heterogeneous systems, where the actions of market participants have consequences far beyond the boundaries of the firms (Mittelstaedt et al, 2006). Thus, marketing systems are the primary unit of analysis instead of individual firms or consumers (Hunt 2002, Layton 2007). Mittelsteadt et al, (2006) suggest that macromarketing is the study of the agora, which means that studying the marketplace involves much more than just the exchanges. Markets are systems with antecedents and they have a central role in society, they involve the interests of their actors, both economic and social. As the ancient agoras were the places where all social structures could be observed on a market day, the notion is highly useful when the intention is to collect intangible, socio-cultural-cognitive drivers in transition dynamics.

Layton and Duffy (2018) argue that all marketing systems are path dependent and affecting the ways marketing systems form, grow and evolve. They suggest that "*the choices made by all participants in a macromarketing system at any level of*

aggregation have their origins in the bounded rationality of human decision processes" (Ibid., 2018: 411). Kemper and Ballantine (2017) introduce the multi-level perspective (MLP) to macromarketing and show how the marketing systems framework relate to the socio-technical perspective, as it involves entire innovation systems of production and consumption. They add to the marketing systems framework by outlining MLP systems level (Geels 2004), the regime, niche and landscape, to aid in the analysis and discussion of systematic change. As stated by Kemper and Ballantine (2017: 382) *"socio-technical regimes are those that benefit the most from the status quo in innovation and marketing systems"*. They call for more understanding about the lock-in mechanisms and rules which occurs in regimes, as well as how they relate to the niche and landscape.

As the energy transition is a complex systems transition and a wicked problem because it includes all stakeholders and actors in society, and is connected to wider sustainability issues (outside the core energy related factors such as technology or source), challenges of production and consumption needs to be approached from a systems perspective. *"The nature of the sustainability challenge means that previously dominant ways of doing things and understanding the world need to be reconsidered in order to make way for knowledge systems that can deal with accelerating change, increasing complexity, contested perspectives, and inevitable uncertainty"* (Lotz-Sisitka 2015 in Pereira et al 2020: 2). Thus, regarding energy consumption and production as socially constructed processes, and considering that people are socialized into consumption systems which are embedded in the dominant social paradigm (DSP), means it might be challenging to grasp holistic and sophisticated understandings of sustainability outcomes. The myopia and bounded rationality inherent in transitions of complex, path-dependent socio-technical systems, challenges the idea of coherent, consistent decisions from an external point of view.

Following the notion of path dependence and myopia in the transition process (Brown et al, 2013), cognitive path dependence, and the consequence of inflexible and shared belief systems or mental models, becomes of interest (Mantzavinos et al, 2004, Denzau and North, 1997 in Haase et al, 2009). To elaborate upon how path dependence as mental models might affect energy transition dynamics, this thesis explores how individual discourses, so called rational myths, translate into institutionalized, legitimate norms and habits. It draws from earlier work by Zilber (2006) on institutionalization as translation of myths. This is done by analyzing discourses from three different levels of actors, the micro, meso and macro, collecting the dominant ones as energy myths circulating in the energy agora framework.

Myths and mythologies provide a way of explaining dominant ideations as legitimized systems of mental models constructing the energy agora. They work as socio-cultural constructs, used by actors in translation of their meanings to others or as market shaping, institutional work (Lawrence et al, 2011). Myths have the power to move between the tangible and intangible spheres of a social matrix, the socio-cultural-cognitive institutions of a socio-technical energy marketing system. Throughout the history of marketing, advertising and mass media have freely drawn from mythic archetypes and plotlines (Stern 1995) to create compelling stories, characters and promotional appeals (Holt 2004). Thus, myths and mythologies permeate consumer culture (Levy 1981, Humphreys and Thompson 2014). Rational myths that are purposely expressed by individuals, are rooted in timeless, universal mythologies found at the core of meaning structures, operating from the base of culture and paradigm (Zilber 2006). Mythologies exert a form of collective symbolism that connects to the human subconscious, existing outside the rational cognitive sphere (Campbell 1973, Campbell 1990, Pinkola Estés 1996) and might be found working in the structures of the dominant social paradigm (DSP).

Thus, the agora framework sets the stage for the socio-cultural dynamics of (energy) transition to be captured. Rational energy myths, circulating the Finnish energy agora, draw from their national and mythological roots, and translate the individual energy ideations into accepted, legitimized constructs, collectively shaping the institutional structures of the socio-technical marketing system wherein the (responsible) consumer resides. Exploring how ideations translate in the agora is an attempt to understand how mental path dependence is maintained in transition processes and how the DSP reinforces itself, making the sustainability goals of transition to the NEP challenging.

1.1.2 Short history of energy transitions

"*Since 1970, the world has seen rapid growth in energy demand, mainly satisfied by fossil fuels and centralized power generation. The future is expected to be different. Energy Transition does not happen in a vacuum, it is shaped by a much broader and fundamental shift in prosperity, progress, politics and planet. We call this faster and fundamental shift in context – The Grand Transition*" (WEC 2016: 8).

Historically, the energy transitions have been driven by the need and availability of energy sources. Transition as an idea or concept suggests the movement from one state to another, from one place of departure to another of arrival (Sarrica et al, 2016). There are many definitions of energy transition such as: "*An energy*

transition refers to the time that elapses between the introduction of a new primary energy source, or prime mover, and its rise to claiming a substantial share of the overall market" (Sovacool 2017: 2) or "*the switch from an economic system dependent on one or a series of energy sources and technologies to another*" (Fouquet and Pearson 2012: 1). There seems to exist opposing views regarding the how long it might take for an energy transition to occur. Generally, it seems that most energy transitions in the past history have unfolded over long periods of time (Fouquet and Pearson 2012). It seems though, that history presents us with both cases: Extremely prolonged affairs such as the global energy transitions to the market domination of coal and oil. Interestingly, the first commercial coal mines were developed in England in the 1300 century but the actual market takeover happened 500 years later when it passed the 25% mark in 1871. Respectively oil was drilled from the first commercial well in the US 1859, but the market share of 25% was passed in 1953 (Sovacool 2017: 3). On the other side, there is evidence of quick energy transitions, Brazil managed to increase ethanol production and substitute ethanol for petroleum in conventional vehicles so that in six years, from the start of the Proálcool program in November 1975, in 1981 over 90% of all new vehicles sold in Brazil could run on ethanol (Sovacool 2017: 10).

Regarding the big, globally ongoing energy transition, the global climate negotiations to curb emissions and slow down climate change started in February 1979 with the first World Climate Conference in Geneva. It took over thirty years before a first global consensus was achieved, when in 2015, the COP21 Paris agreement, 196 parties (countries) signed the agreement to limit global warming to well below 2 °C (UNFCCC 2021). Since the adoption of the COP21 Paris Agreement, the energy transition to low carbon has been about the downshift of fossil fuel production to stay within the carbon emissions budget to limit global warming to less than 1.5 °C (Roberts et al, 2018). Thus, the low-carbon energy transition (or the grand shift), aims towards sustainable socio-technical systems using renewable energy sources such as solar, wind and geothermal and clean technology. Meeting the aims of the Paris Agreement before 2050 involves major transitions in global energy systems and the energy sector is undergoing a huge transition. Many trends affect the energy trajectories, for example; urbanization, digitalization, IoT, technological development for capturing solar and wind power, geothermal and hydrogen (WEC 2019). The expectations are that the future of energy will be low-carbon, new technology, new services and active customers. Diverse forms of production, diversity in energy mix, and also ways to work will be different (WEC 2016). Still, the global energy transition away from the fossil fuel-based energy systems has proven slow despite the potential of renewable energy

sources and advancing technologies to utilize those (Berkhout et al, 2012, Roberts et al, 2018).

1.1.3 The Finnish energy system in transition

The Finnish energy system is in the midst of a transition to meet the 2050 target to become a zero emission society. Finland has traditionally been a centralized system where big energy companies have a strong impact upon the market (Berninger et al 2017). The total energy consumption in 2019 (OSF 2020) shows that the main sources of the Finnish energy mix are fossil fuels (oil, coal and natural gas) 34%, nuclear power 18% and wood fuels 28%. Wind power production has been growing rapidly and in 2019, together with the (declining) use of hydropower, had a 5% share of total energy consumption. The use of solar power is also growing, but was still only 0,5% in 2019 (OSF 2020). Altogether, the proportion of renewables has grown steadily and reached nearly 38% of total energy consumption and 43% of final consumption in 2019. Finland has exceeded its target for the share of renewable energy which was set as 38 % of final energy consumption since 2014, this has been the second highest among EU countries (OSF2020). The reason for Finland having such high percentage of renewable energy is, that most of the renewable energy comes from wood fuels such as forest residues used by the pulp and paper industry (Berninger et al, 2017, Heiskanen et al, 2019). Nuclear energy also plays a major role in the implementation of the Finnish Climate and Energy strategy (TEM 2021).

The National Energy and Climate Strategy for 2030 was confirmed by former Prime Minister Sipilä's government in 2016, the long term goal is to become a carbon neutral society by 2045 (SITRA 2018, Motiva 2019). The Finnish energy policy is now seen to be in transition as well, with a broader focus upon the impacts of current energy projects upon sustainability, liveability and innovation contexts (Heiskanen et al, 2019). This means that the energy transition challenges conventional ways of developing the energy system and affects the distribution of both electric power and 'human' power between actors (Berninger et al, 2017). Policy measures have been traditionally focused on the needs of the industry (Heiskanen et al, 2019), there is a clear statement from the Ministry of Economic Affairs & Employment in Finland that that the industrial competitiveness must be maintained throughout the energy transition (Child et al, 2020).

Finland is highly industrialised, with forestry and basic metals as important pillars (Berninger et al, 2017). Manufacturing is the most energy intensive area of the Finnish system, in 2019 it consumed 45% of the total energy (OSF 2020). Local electricity companies are also usually the owners of district heating facilities, which

is a common way to warm houses in Finland. The district heating network is a good example of technological lock-ins and "incumbency" in the Finnish system as municipalities have invested a lot in these infrastructures (Berninger et al, 2017). The country is also known for its high tech and Cleantech, digitalization and AI represents major developments in Finland's ongoing Energy Transition. In general, the transition towards carbon neutrality is expected to have a big impact on business models and revenue generation (WEC 2019).

The energy used in private houses, service businesses and public institutions is mostly electricity and comes from the national grid (TSO). Electricity produced by prosumers or energy communities is still marginal. Local grid companies (DSO's) charge a distribution fee for the electricity and the Finnish electricity market is based upon a double fee. In a survey by Finnish Energy 2020 (Energiateollisuus) on energy attitudes among Finns, the three most important political goals regarding energy where: Reasonable energy prices 63%, more renewable energy 62% and cutting emissions to combat climate change 55%. In general, consumers were clearly in favor of renewable energy; 89 % preferred more solar power, 80 % wind, 56 % other types of bioenergy and 56 % hydropower (Energiateollisuus 2020). Finnish consumers are very positive towards different renewable heat and power technologies, with solar and geothermal energy at the forefront.

1.1.4 Marketing and sustainability

As the need for green transition and a paradigm shift is gaining momentum globally, sustainability marketing – the relationship between marketing and the natural environment has been gaining more attention amongst marketing scholars (McDonagh and Prothero 2014, Martin and Schouten 2014, Kemper and Ballantine 2019, Yngfalk 2019, White et al, 2019). Different schools of marketing thought have sought to answer sustainability issues, from narrow managerialist focus to broader, macromarketing systems (Kilbourne and Beckmann 1998). In the critical marketing literature, it is argued and criticized that sustainability has traditionally been treated as a micro, managerial issue and not a macro, pressing issue (Hackley 2009, McDonagh and Prothero 2014). Kemper and Ballantine (2019) asked what sustainability marketing means (to marketing scholars) and teased out three conceptualisations: Auxiliary Sustainability Marketing (with focus on the production of sustainable products), Reformative Sustainability Marketing (which extends the auxiliary approach through the promotion of sustainable lifestyles and behavioral changes) and Transformative Sustainability Marketing (which further extends the auxiliary and reformative approaches through the need for transformation of current institutions and norms, and critical reflection). They

(Ibid. 2019: 293) suggest that transformative sustainability marketing is needed to change social and political institutions to favor sustainable consumption and paradigm change. This entails taking an institutional theory perspective. This fits into the line of argument expressed by Dholakia (2009) and McDonagh and Prothero (2014), stating that research exploring contemporary context-shaping phenomena should be transformational and not incremental. According to Varey (2012) it is not enough to incorporate sustainability values into policies and practice, but to integrate ubiquitous marketing into a sustainable society. This requires a transformation from merely "green marketing" doing less damage to restorative marketing that actually strives to undo previous damage and restore valued assets to make people's lives better.

According to McDonagh (2017) understanding sustainable consumption only from the micro (customer) viewpoint is not enough to change development into a more sustainable direction. The importance of acknowledging the way consumption practices are steered by institutional interests becomes important. McDonagh and Prothero (2014) state that sustainability is the defining context shaping phenomena of this century and we must engage in transformational research to have a further impact upon marketing. Thus, there is a call for marketing thinking that uses macro, system level approaches (Little et al, 2019), and that can deal with the multidimensionality of the sustainability problems and also point out the role of institutions (economic, politic and industrial) more clearly (McDonagh 2017). Altogether, the need for a paradigm shift calls for a marketing approach that searches for a more profound understanding of the mechanisms by which consumer behavior is steered. These mechanisms, according to various researchers (Giesler and Veresiu 2014, Humphreys and Thompson 2014), are driven by the interests of the dominant institutions at the core of modern Western societies: political, industrial and economic (Kilbourne and Middlestaedt 2012).

1.2 Positioning of the study: A Macromarketing perspective to the mitigation of climate change

This thesis takes a multidisciplinary approach, drawing from the fields of Macromarketing, sustainability marketing, transformative consumer research (TCR) consumer culture theory (CCT) and sustainability transitions research (see Fig. 1). In the center is the question regarding the role of Macromarketing in the Anthropocene and climate change adaptation and mitigation. This thesis builds upon earlier research in marketing systems dynamics (Layton 2007, Layton and Duffy 2018), the idea of the marketplace as the ancient agora (Mittelstaedt et al, 2006) and the impact of the dominant social paradigm (DSP) (Kilbourne et al,

2009, Prothero et al, 2010, Humphreys 2014) on sustainability. There is a call for more knowledge of the formation, development and evolution of marketing systems (Kadirov 2018, Little et al, 2019). To answer this call, this thesis adds to the macromarketing systems knowledge by proposing the energy agora framework. The energy agora framework suggests a way to capture dominant collective belief systems in a multi-level socio-technical marketing system. It facilitates the exploration of how socio-cultural-cognitive mental models shape transition trajectories and thus might affect (un) sustainable path dependence.

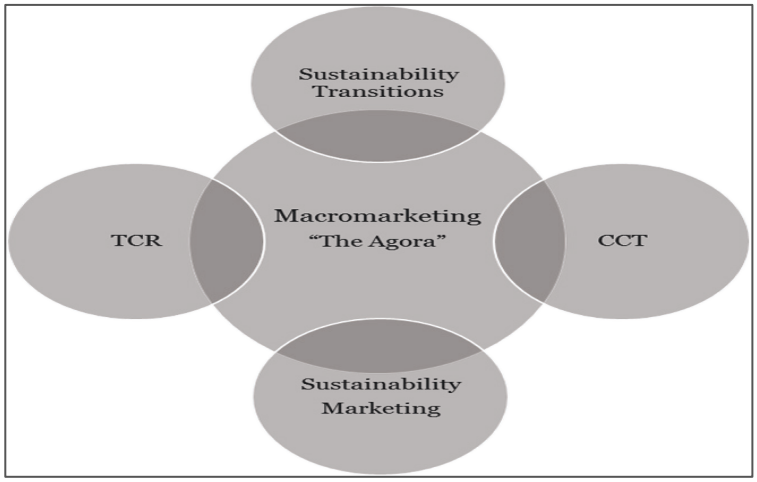

Figure 1. Positioning of the thesis

Macromarketing focuses on the study of marketing systems (Layton 2007), the impact of those systems on society, as well as the impact and consequences of society on marketing systems (Hunt 1977, Hunt 2002). Macromarketing as agrology means using the notion of the ancient marketplace, the agora, to capture the complexity inherent in social interaction and exchange (Mittelstaedt et al, 2006). Marketing systems are seen as having direct impact on the societal well-being and the quality of life as well as the environmental sustainability (Varey 2012, Sandıkcı and Kravets 2019). Because of its complexity, the topic of change and more specifically, the inquiry into the formation, development and evolution of marketing systems is calling for more attention (Kadirov 2018, Layton 2019, Little et al, 2019). Previous research suggests that dominant actors, involved in the social mechanisms of a marketing system, have the power to shape its evolution (Humphreys 2014, Kadirov et al, 2016, Kemper and Ballantine 2017) and that the bounded rationality of actors might perpetuate path dependence and lock-ins of transition pathways (Haase et al, 2009, Layton and Duffy 2018). Earlier research has also found that the DSP of western society functions as an institutional foundation for materialism and thus has the power to affect (un) sustainability

outcomes in marketing systems (Kilbourne et al, 2009, Kilbourne and Mittelstaedt 2012, Varey 2012, McDonagh et al, 2014, McDonagh 2017).

This thesis creates more understanding about the socio-cultural-cognitive dynamics in socio-technical marketing systems. This is done by exploring how dominant beliefs and ideologies circulate as mythical constructs in the energy agora. Thus the energy agora framework is a place to capture dominant, collective mental models that might act as socio-cultural drivers of change in a given marketing system. The energy agora is conceptualized as the place to capture rational energy myths (discourses) and the dominant institutional mindsets carried and translated by micro, meso and macro level actors. By exploring the dominant ideologies in the agora, the social sphere of the marketing system, and how they shape the trajectories it participates in Macromarketing's perspective in the Anthropocene and the discussion about the transformative role of marketing in creating pathways to adaptation and mitigation (Hall 2018).

To grasp the socio-cultural-cognitive complexities in energy transition dynamics, this thesis also draws knowledge from three other fields in marketing (sustainability marketing, TCR and CCT). In sustainability marketing there is a search for solutions to bridge the sustainability attitude/behavior gap (McDonagh and Prothero 2014) and research shows how sustainability gets distorted by the "responsibilization" of consumers by corporations (Giesler and Veresiu 2014, Humphreys 2014, Yngfalk 2019). Kemper and Ballantine (2019) suggests transformative sustainability marketing that aims to change unsustainable institutions and acknowledges that consumers face barriers created by institutions, social norms and ideological stances embedded in the DSP. Sustainability marketing and transformative sustainability marketing stress the importance of addressing the institutional environment and suggests taking an institutional perspective to explore micro-macro market tensions and the inherent worldviews. This thesis participates in the (transformative) sustainability marketing discussions by taking a multi-level approach on marketing systems and exploring mental models (worldviews and DSP) of actors in different social roles. It thus follows the process of institutionalization as translation (Zilber 2006) and shows how the same energy myths circulate in the different levels of the energy agora.

Transformative consumer research (TCR) has its focus upon the well-being and quality of life of consumers, and searches to understand the circumstances causing social problems, inequalities and poor quality of life (Mick et al, 2012). In the TCR domain, earlier research using socio-cultural and situational approaches, shows that many consumer problems originate from the structures of the market and its

institutions (Figueiredo et al, 2015). There is a call for more approaches that highlight socio-cultural and situational contexts that unveil hidden or little known social problems, seeking their deeper understanding and attracting public attention and resources. Here, we use 'markets as the central organizing principle' (the energy agora) to understand the big picture where micro-macro interactions take place. Findings show that there is lack of diversity in the energy transition roles, and that the DSP legitimizes certain discourses whilst downplays others affecting energy (consumption) choices.

Central question stemming from the intersection of consumer culture theory (CCT) and macromarketing are how consumption participates in the constitution of society (Askegaard and Linnet 2011) and how the consumption – production dilemma should be approached (McDonagh 2017). This thesis has borrowed the cultural approach from CCT to help understand forces such as ideological, social, historical and institutional that structure consumption (Arnould and Thompson 2005, Kilbourne et al, 2009) as well as reveal dialogical relationship between consumers and markets structures (Sandıkcı and Kravets 2019). Earlier research on marketplace myths (Thompson 2004) and consumer mythologies (Stern 1995) opens the creative world of using marketing tools and thinking to explore the roots to the dominant mental models and ideations circulating the energy agora as rational energy myths. This means using the transformative powers of cultural branding (Holt 2004) and myths (Levy 1981, Stern 1995) to explore deeper, intangible beliefs tied to the national, socio-cultural beliefs and also the DSP. Here the dialogical relationship between consumers and market structures has been approaches as the institutionalization as translation process (Zilber 2006) in the agora. Thus, this work also touches upon the discussion of how the 'context of the context' (Askegaard and Linnet 2011) operates in shaping energy trajectories (or maintain path dependence).

Finally, as the research interest of this thesis is the energy transition and its dynamics it needs to include the field of sustainability transitions. Sustainability transition research has earlier received critique for its too much technology oriented approach to socio-technical transformation (Markard et al, 2012). As stated by Geels (2020) the main focus has traditionally been on explaining 'meso-level' (regime) factors affecting the diffusion of innovations. Today, the evolving field of sustainability transitions research covers multiple perspectives. According to Köhler et al, (2019: 4) these perspectives are divided into following: Understanding transitions; Power and politics; Governing transitions; Civil society, culture and social movements in transitions; Organizations and industries in sustainability transitions; Transitions in practice and everyday life; Geography of transitions: spaces, scales and places; Ethical aspects of transitions:

distribution, justice, poverty and Reflections on methodologies for transitions research. Out of these themes, this thesis draws from research focused upon understanding transitions, including the MLP view (Geels 2004), as well as the interest for institutional processes in shaping the regime, e.g. dominant system and its rules (Fuenfschilling and Truffer 2014). There is also a call for furthering the understanding of the micro-macro dynamics, or the 'whole system reconfigurations' as the complexity inherent in sustainability transition processes is hard to grasp from one level of analysis. Köhler et al, (2019: 22) also raise the question about the practical impact of the research, "*how to engage with real-world actors, systems and transitions*" and "*can and should researchers in the field be part of transition initiatives and apply ideas of transitions management in pilots, living labs and action research*"?

This thesis provides a perspective upon the way the DSP might maintain path dependence in transition trajectories, hampering sustainability initiatives from a level that might be difficult to pinpoint, as it is embedded into the mental models of the actors and the institutions. The data is so called 'raw' data, collected from different energy transition related events in Finland, namely wind power opposition meetings (essay 1), energy self-sufficient regions project and living lab environment (essay 2) and energy transition focused seminars and conferences (essay 3). By presenting the energy agora framework, the level of analysis comprises 'the whole system' as for micro, meso and macro level actors in the Finnish energy system. It provides a way to explore collective, socio-cultural-cognitive factors that affect the transition process. The framework enables the capturing of dominant energy myths and exploring their paradigm (mythological) roots. This thesis also suggests that transition researchers and managers, as well as other actors in intermediary roles might benefit from considering what mythical work implies in their own work.

To sum up, this thesis integrates perspective from multiple fields of research (see Fig. 1). It views consumers as part of a complex system that includes business, media, regulators and policy makers (Giesler and Fischer 2017) as it seeks to bring light upon how people construct and enact their identities in relation to, or opposition to, historically conditioned, institutional arrangements (Arnould and Thompson 2005) in the context of energy transition. As stated by Sandıkcı and Kravets (2019: 6), *Macromarketing can, and should, adopt more critical and reflexive perspective on cultural clashes and contacts in the marketplace.* The intersection of Macromarketing and CCT perspectives can contribute to critically-oriented analyses of the interactions between markets, marketing and society. Here, these perspectives are used to approach the notion of path dependence and lock-ins as mental models that maintain institutionally legitimized belief systems.

The TCR focus is upon transforming consumer behavior into more sustainable (well-being) and takes the micro-level perspective. Still the means to act on the individual level are embedded in the institutional structures of the system, here the sustainability transitions knowledge provides useful perspective of the bigger picture and its dynamics. The multi-level perspective (MLP), together with the marketing systems framework, and understanding of social mechanisms, creates a larger frame for exploring the individual to collective, intangible, socio-cultural-cognitive factors affecting transition dynamics. This means zooming in on mental models and paradigm bound worldviews that might shape transition trajectories and thus also affect path dependence.

1.2.1 Purpose of the thesis and research questions

The need for further knowledge upon socio-cultural-cognitive drivers in (energy) systems transition is recognized both by macromarketing (Kadirov et al, 2016, Kemper and Ballantine 2017, Layton and Duffy 2018) and sustainability transitions scholars (Köhler et al, 2019, Markard et al, 2020). To answer the call, the research interest of this dissertation is to gain a better understanding about socio-cultural-cognitive drivers in transition dynamics. This is done by exploring the discursive constructs of energy realities, the so called rational energy myths (social-rational) and how they tie to national myths as well as their universal mythological (cultural-paradigm) origins. The specific research gaps are presented in Table 1.

Special attention is given to the deep drivers or blind spots in the cultural-cognitive sphere surrounding myopia and lock-ins, also called mental path dependence. This thesis contributes to the field of macromarketing by presenting the energy agora framework, used to capture dominant rational energy myths that circulate in a socio-technical marketing system. It also participates in the discussion about how the dominant social paradigm (DSP) enables or disables sustainability in the marketplace. As stated earlier, myopia and lock-ins seems to be unavoidable challenges inherent to transition processes and the exploration of intangible, socio-cultural -cognitive drivers in transition dynamics should provide new insights into managing transitions.

The aim of this dissertation is to create better understanding of the sustainability transition dynamics of energy marketing systems, and the way they are shaped and/or the current regime maintained.

The focus is upon dominant energy myths, circulating the energy agora in the Finnish socio-technical energy marketing system. More specifically, discourses are

presented as rational energy myths, drawing from national myths and universal mythologies in the process of institutionalization as translation. In the energy agora framework, we explore transition tensions, path dependence and lock-ins as mental models that exists as institutional logics on multiple levels of the energy marketing system. The renewable energy discourses produced by social actors in macro, meso and micro level roles are analyzed in three separate essays, which are finally corroborated into the energy agora framework in the summary of the thesis. This dissertation touches upon a relevant challenge regarding the Finnish energy marketing system, which is undergoing a major transformation and where many different economic, political and social interests are at stake.

Table 1. Research gaps and intended contribution

Research gap	**Intended contribution**
Macromarketings role in combating climate change	Multi-disciplinary approach to marketing systems evolution and the exploration of how the DSP is maintained or possibly challenged in MLP socio-technical systems
There is a need for more knowledge of the formation, development and evolution of marketing systems	The Energy Agora Framework and Mythical Work
Call for more understanding of socio-cultural-cognitive dynamics affecting (un) sustainability in energy transitions	Follow the institutionalization as translation process and how rational energy myths work as a marketing system shaping forces affecting mental path-dependence and lock-ins

The General research questions are:

- **What happens in the transition process that 'hijacks' deep sustainability before it can transform the system?**
- **How come we maintain unsustainable systems and choose innovations that cause more environmental harm in trying to solve the emission challenges?**

To answer the broad general research questions, the research interest of this dissertation is to gain more understanding about socio-cultural-cognitive drivers in transition dynamics by exploring the discursive constructs of energy realities – so called rational energy myths (social-rational) and their national mythic and universal mythological (cultural-paradigm) origins.

The specific research questions can be stated as follows (see Fig. 2):

- **RQ1: *How do people construct their energy realities in the context of the Finnish energy marketing system?*** This question is answered in the three essays by exploring discourses produced by actors at the consumer (micro), business (meso) and governance (macro) levels. This will be discussed in section 5.1.

- **RQ2: What kinds of energy myths circulate the Finnish energy agora?** Here I reveal the dominant rational energy myths across the three (micro-, meso- and macro) levels in the agora framework. This is done by following the discourses as mythical constructs (plots) translated by individuals who are considered as carriers of institutions. Further, the connection to national myths, and universal mythologies is discussed. This is revealed in section 5.2.

- **RQ3: How to use the energy agora framework to uncover mental path dependencies and lock-ins?** This third question relates to the wicked challenges inherent to transition processes and the guiding research questions: What happens in the transition process that 'hijacks' deep sustainability before it can transform the system? How come we maintain unsustainable systems and choose innovations that cause more environmental harm in trying to solve the emission challenges? To gain an eagle eye perspective upon socio-cognitive roots to mental path dependence, the energy agora is put to work in section 5.3.

The findings from the three essays, presented in chapter 4, have been corroborated and brought into the energy agora framework in chapter 5. Chapter 5 is also where the thesis contributions to the fields of Macromarketing, Sustainability marketing, TCR, CCT and Sustainability transitions are presented. Figure 2 presents an overview of the research questions and how they are answered to by the essays and the summary chapter.

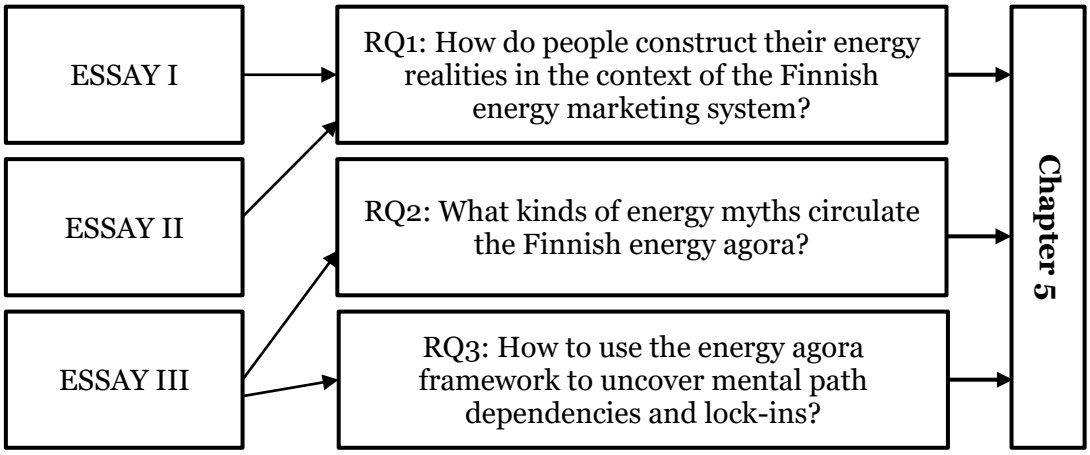

Figure 2. Overview of the dissertation research questions

The overview of the research questions clarifies how the three essays are answering to the research questions. The arrows show the original organization of the research logic. Chapter five (Chapter 5) works as the space where the findings from the individual essays are further corroborated and presented in the light of the energy agora framework.

1.2.2 Structure of the dissertation

The structure of this dissertation is divided into six chapters as presented in figure 3. The introduction (Ch.1) presents the reader with the background and context of the study, positioning it into its research fields as well as stating the research purpose and questions. Second chapter (Ch.2) presents the theoretical underpinnings and the energy agora framework. Third chapter (Ch. 3) sheds light on the methodological choices, research philosophy and analytical frame. In the fourth chapter (Ch.4), discourses produced on the different levels are analyzed in the three essays (one for each level). This chapter summarizes the findings from the essays. Chapter five (Ch.5) analyzes the findings from the three essays further in reflection to the theoretical framework, and presents the contributions of the dissertation. It also discusses the limitations and gives some future research suggestions. Finally, chapter six (Ch.6) adds concluding remarks on the research process.

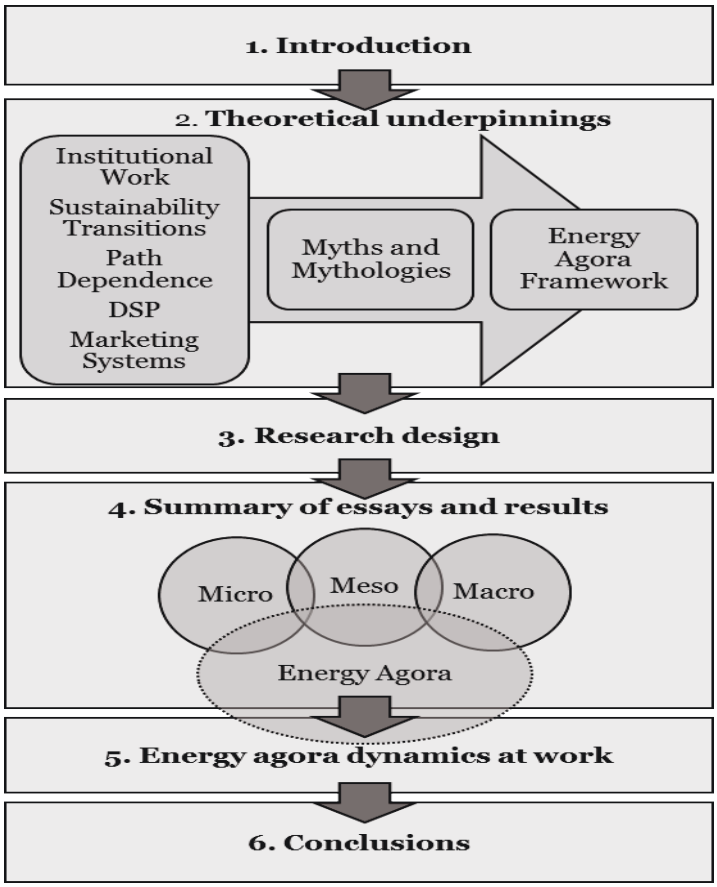

Figure 3. Structure of the dissertation

Next chapter (Ch. 2) presents the theoretical underpinnings of the Energy Agora framework and explain how energy myths and mythologies are approached in this work. It follows the structure outlined in figure 3.

2 AGORA APPROACH TO ENERGY MARKETS

2.1 Theoretical underpinnings

2.1.1 Institutional theory and institutional work

As it is at the institutional level that social structures are given legitimacy (Berger and Luckmann 1967), the understanding of marketing systems, and how they can be maintained or transformed through rational myths, calls for understanding the institutional forces that influence people's perceptions and behavior. Institutional theory gives a useful framework to "*discern the sources of institutional patterns, their subsequent elaboration and potency as well as the settings where they operate with the greatest resonance*" (Dacin 1997: 47). Earlier research explain sustainability challenges related to institutional structures such as: Technological lock-ins (Markard et al, 2012, Geels 2004), institutional barriers to actors in the MLP (Fuenfschilling and Truffer 2014, Geels 2020), institutional lock-ins and path dependence (Layton and Duffy 2018, Varey 2012), institutional rigidness and mental path dependence (Haase et al, 2009), psychological barriers (Stoknes 2014, Gifford 2011) and DSP (Kilbourne et al, 2009, McDonagh 2017).

A common thread to these different approaches, is the acknowledgement of the pervasiveness of different (unsustainable) institutions, both behavioral and material, and the way they are built to maintain the status quo, the dominant paradigm they adhere to (Kilbourne et al, 2009). This logic also fits to the incumbency of the regime in a socio-technical system (Markard et al, 2012, Fuenfschilling and Truffer 2014, Köhler et al, 2019). Recent marketing research show how unsustainable practices are maintained by managers in retail chains (Yngfalk 2019), in national accidents (Humphreys 2014) and how market shaping activities, so called institutional work, affect the market development (Battilana 2006, Zilber 2006, Moisander et al, 2016, Baker et al, 2018). The work is an intentional effort or action by an actor that may shape an institution or social structure or maintain a given situation (Lawrence et al, 2011, Baker et al, 2018).

In Macromarketing, the institutional foundations of societal and market relations are conceptualized and measured within the framework of the dominant social paradigm (DSP) that comprises several dimensions: economic, political, technological, organizational, and functional (Kadirov et al, 2016). It is argued that challenges in addressing unsustainable path dependence and lock-ins of mental models, lie in limited knowledge and guidance on how to re-institutionalize socio-cultural belief systems. Institutional theory recognizes that actors have field

positions which refers to their legitimate identities in a field, including their formal roles (Furnari 2014).

2.1.2 Sustainability transitions and the MLP

A sustainability transition can be defined as a "*radical transformation towards a sustainable society as a response to a number of persistent problems confronting contemporary modern societies*" (Grin et al, 2010: 2). The focus is upon how to promote and govern fundamental transformation of socio-technical systems towards more sustainable modes of production and consumption (Markard et al, 2012). Sustainability transitions research "asks big picture questions" (Köhler et al, 2019) and the underlying motivation is the recognition that many environmental problems, such as climate change and loss of biodiversity comprise grand societal challenges. These problems cannot be addressed by incremental improvements and technological fixes, but require radical shifts to new kinds of socio-technical systems. The research focus has traditionally been upon the so-called meso-level of socio-technical systems (Geels 2004, Geels 2020) differing itself from macro-level such as changing the nature of capitalism, or the micro-level, individual choices, attitudes and motivations. Sustainability transition research aims at conceptualizing and explaining how radical changes can occur in the way that societal functions are fulfilled. Thus, there is a call for furthering the understanding of the micro-macro dynamics, or the whole system reconfigurations (Köhler et al, 2019) as the complexity inherent in sustainability transition processes is hard to grasp from one level of analysis.

A socio-technological system or the co-evolution of technology and society consists of societal functions such as the production of electricity for a city, which are fulfilled by a cluster of elements involving technology, science, regulation, user practices, markets, cultural meaning, infrastructure, production and supply networks (Geels 2004). Socio-technological shifts are rarely put into motion by only one group of actors or environmental circumstances, they usually require enough pressure from all three levels. System shifts can be divided into different levels ranging from mere reproduction to a deeper transformation or a total transition (Geels 2010). Reproduction happens when the key actors and practices remain more or less the same and the change is merely one of a more efficient technology fulfilling the same tasks as earlier. Transformation requires a change of practices and infrastructure as well, whereas a transition entails a remaking of the whole system including key actors. As socio-technical systems also includes the user side (Geels 2010) meaning that all levels of shifts encompasses consumer adoption of new technology and practices.

The MLP framework (Fig. 4) considers radical change as the entrance of new and disruptive innovations into the existing legitimate regime from the niche-level. The new innovations challenge the dynamic stability in the socio-technical regime, the ruling system maintained by its legitimized institutions. This is also where the fight over power or multi-dimensional struggles between niche-innovations and regimes exist. The landscape-level comprises influences from the broader context, which most likely create pressure on the regime, these are issues such as global politics, climate change and dominant paradigms (Geels 2004, Geels 2020). The landscape level has traditionally been considered as slow moving trends, but the pace of globalization and digitalization, as well as the sustainability challenges can be seen as putting immediate pressure on the socio-technical regimes. The MLP framework by Geels and Schot (2007) describes the different levels and the dynamics of the multi-level perspective in transitions (Fig. 4).

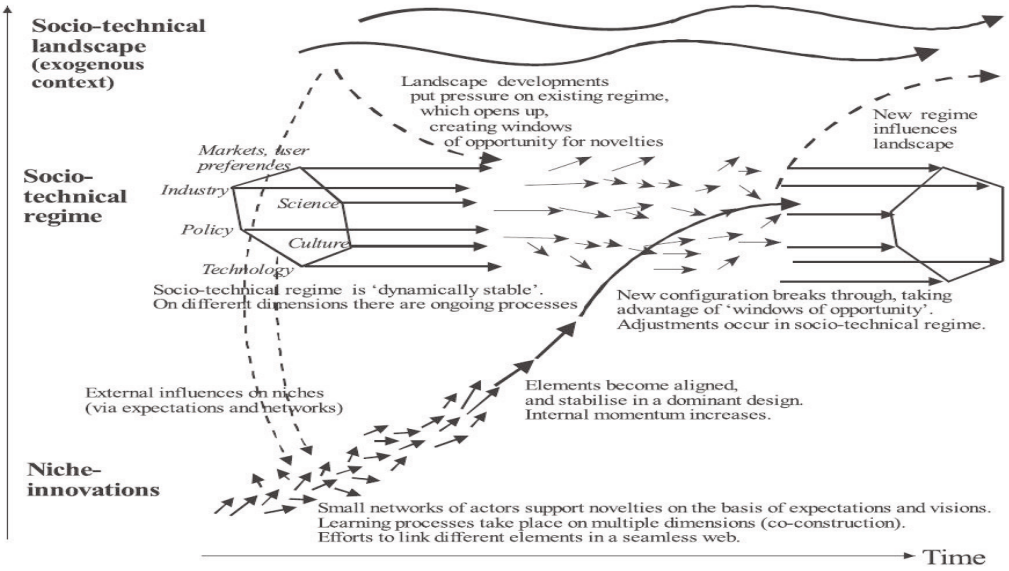

Figure 4. Multi-level perspective on transitions (Geels and Schot 2007: 401)

In above figure, the MLP is presented as a processual framework that explains transition dynamics as the alignment of trajectories and ongoing processes within and between the three analytical fields; niches, regime and landscape. These dynamics are alignments between multiple processes and they follow an evolutionary logic and are socially enacted (Geels 2020). In other words, the MLP presents or more precisely, consists of, highly contested fields of action and institutional struggles (Andrews-Speed 2016) such as political, business and consumers that affect the transition pathways.

Transition management, where the MLP approach plays a central role, is a fairly young field of research that is still evolving and opening up space for different

theoretical and methodological choices (Brown et al, 2013, Köhler et al, 2019). Altogether, socio-technical transitions are considered as long-term macro-changes that require systemic views over multi-dimensional factors. Thus, sustainability transitions are goal-oriented as they address persistent ecological challenges (Markard et al, 2012), but the ways to reach those goals are usually not clear or more exactly pretty messy (Loorbach 2010). The changes required in transitions are often of such large scale and the actions needed sometimes so radical that they "freeze the mind of people" (Stoknes 2014) leading to denial and resistance even if there is an obvious need for action.

So, who can manage transitions? One of the research focuses in the sustainability transitions domain is how so called intermediaries, actors connecting multiple other actors in transition processes work. Intermediary actors have been proposed as key catalysts that speed up change towards more sustainable socio-technical systems as part of sustainability transition policies. The notion of intermediaries (Stewart and Hyysalo 2008) and hybrid actors (Elzen et al, 2008) are used to describe individuals creating bridges between niches and regime or linking of users into supply-side innovation (Kallio et al, 2020). They employ functions of visioning, networking, institutional support and capacity building (Kivimaa et al, 2019). There is an ongoing discussion whether and how transition researchers should be involved in real-life transition actions (Köhler et al, 2019).

2.1.3 Path dependence

Most energy transitions have been, and will likely continue to be, path dependent rather than revolutionary, cumulative rather than fully substitutive (Sovacool 2017: 17). In the context of sustainability transitions, path dependence implies messy interactions between technology, policy, power, politics, economics, business, markets, and culture, discourse, as well as public opinion (Unruh 2000).

"The socio-technical regimes are structures constituted from a co-evolutionary accumulation and alignment of knowledge, investments, objects, infrastructures, values and norms that span the production-consumption divide, which overall provide lock-in mechanisms preventing the adoption of improved processes and technologies (Smith et al, 2010 in Kemper and Ballantine 2017: 383). Approaches that address the multi-dimensional nature of sustainability transitions and the dynamics of structural change are needed. With regard to structural change, the problem is that many existing (unsustainable) systems are stabilized through various lock-in mechanisms, such as scale economies, sunk investments in machines, infrastructures and competencies (Smith et al, 2005). Also institutional commitments, shared beliefs and discourses, power relations, and political

lobbying by incumbents stabilize existing systems (Unruh 2000). Peoples' (consumers) lifestyles and preferences usually become adjusted to existing technical systems. These lock-in mechanisms create path dependence and make it difficult to dislodge existing systems (Geels 2011). Klitkou et al, (2015) identify nine institutional and technological lock-in mechanisms that might affect transition processes: Learning effects, economies of scale, economies of scope, network externalities, informational increasing returns, technological interrelatedness, collective action, institutional learning effects as well as differentiation of power and institutions. Authors (Ibid. 2015: 35) argue that distinguishing between the nine lock-in mechanisms helps specify how the characteristics of existing regimes set the preconditions for the development of new transition pathways. The interactions between the different mechanisms require more attention.

It is important to understand path dependence in social systems (Layton and Duffy 2018). The concept of path dependence addresses the question why change processes often do not take place although they seem to be urgently required (Blois 2004, Haase et al, 2009, Klitkou et al, 2015) or "that history matters" (North 1990). In new institutional economics, the development of institutions has been analysed in terms of three indicators: small events leading to non-ergodic results, increasing returns and lock-in (Haase et al, 2009: 8). So called self-reinforcement mechanisms are held responsible for lock-in to path dependence in different kinds of social systems (Blois 2004). Self-reinforcement mechanisms include; technical interrelatedness, economies of scale, quasi irreversibility of investments, the so called QWERTY-nomics (David 1985), and consumer learning effects, network effects, fix-costs, and co-ordination effects (Arthur 1988 and Arthur 1996 in Haase et al, 2009: 8).

From the perspective of radical-constructivism, a lock-in is tantamount to what is called an 'Eigen-Value of cognitive systems' (von Foerster 1976: 93 in Haase et al, 2009: 13). This means that the individual always sees the same problems, finds the same solutions to them, and thus refers to the same institutions, knowledge or ideologies. Thus, institutions, knowledge or ideologies are confirmed if individuals act on the basis of individual mental models which are in accord with them. *The less clear the distinction is drawn between knowledge and ideology, the less time is invested in analyzing the difference, and the less individuals reflect upon the distinction at all, the greater the danger of social domain resources is, resources which are not subject of change even if it would be required* (Ibid. 2009: 14). For individuals to recognise that they are on a path or in a lock-in, some kind of a radical external event might need to occur that 'bolts the person out of their comfort zone'. These events can happen on an individual level (injury, loss,

moving) or affecting society at large (COVID19, politics). *This could for example be the enforcement of a formerly unenforced institution, or the unexpected implementation of an institution, which renders the individual unable to act according to its established mental model* (Ibid. 2009: 14). According to Layton and Duffy (2018) evolutionary choice processes are replicated in the continuing individual or collective co-evolution of values, beliefs, actions, and social practices. Decisions made every-day by countless individuals, collectivities and entities, are inputs in the social mechanisms shaping the dynamics of a marketing system. *The argument that these choices are not made in independent isolation, but in company with others in social settings or contexts, is central to our understanding of path dependence in the study of marketing phenomena* (Layton and Duffy 2018: 403).

It is thus useful to approach path dependence from the perspective of mental models, and also a system that is pressured to change from both landscape and regime (and niche) into something radically different, but seems to be re-creating similar patterns when trying to do so. In arguing for the need of a causal understanding of path dependency (Layton and Duffy 2019: 401), authors claim that instead of "*static exploration of what is happening – change followed by consequence and restoration of stability – it is important to think in terms of continuing processes over time*". This also means that we need to be sensitive to the need to return to normalcy. The complexity challenge entailed by the need of a sustainability shift requires stepping out in the unknown. "*External unrelated events also play a role, sometimes jolting a sequence away from a sequence linked to past events, sometimes creating a fresh start perhaps from earthquake or plague, sometimes generating inefficiency and non-ergodicity (as event sequences fail to converge over time on an outcome distribution which is independent of initial conditions), often generated from tipping points in adjacent, supervening or embedded social systems*" (Layton and Duffy 2018: 401).

The Climate emergency, and the COVID-19 crisis have created a situation where the fresh start is a possibility, or might become the only way to deal with the situation. Still, the cognitive path dependence and mental lock-ins might keep us stuck in the paradigm loop. Meaning, when we are supposed to re-think how we want to live, we can only re-create past patterns which are tied to the DSP maintaining unsustainable, materialistic tendencies and competition.

2.1.4 The dominant social paradigm

A social paradigm consists of the institutions, values and beliefs that provide the lens through which members of society view and interpret the world and also steers the interest towards what is considered important (Pirages and Erlich 1974). The biggest constraints on greening and transforming societies from the 'profligate consumption styles of the West' towards responsible consumption and production (McDonagh et al, 2012), can be found in the way the institutions of Western industrial society or the dominant social paradigm (DSP), molds consumer behavior to be consistent with its own, unique requirements tied to materialism (Kilbourne 2004, Kilbourne and Mittelstaedt 2012, Varey 2012, Humphrey and Thompson 2014, Kadirov et al, 2016) while shifting the responsibility of the (unsustainable) outcome on the consumer (Giesler and Veresiu 2014). From a paradigm perspective, the sustainability goals tie to the notion of common good and ecological values also referred to as total quality of life (TQL). There is a need for a New Environmental Paradigm (NEP) (Dunlap et al, 1978, Dunlap 2008), this nature focused paradigm sees our planet as a spaceship with limited resources, and a fragile eco-system with boundaries that need to be respected (Rockström et al, 2009). The ecocentric epistemology of the NEP is overshadowed by the anthropocenic epistemology of the DSP of Western societies (Kemper and Ballantine 2019: 280). At the core of this DSP lies that material- and eternal economic growth are seen as necessities for a well-being society. The root to materialism is said to be found in the philosophies of Locke and Smith; *"The full development of capitalism was enabled by Locke but legitimized by Adam Smith, whose underlying assumptions have become institutionalized in modern capitalism"* (Kilbourne and Mittelstaedt 2012: 295).

The institutions considered the most integral in Western society are the political, economic, and technological, which are also directly linked to consumer behavior (Kilbourne and Mittelstaedt 2012: 263). In Macromarketing, the institutional foundations of societal and market relations are conceptualized and measured within the framework of the dominant social paradigm (DSP) that comprises several dimensions: economic, political, technological, organizational, and functional (Kadirov et al, 2016: 54). The individual efforts are too easily undermined by structural, institutional barriers which are often hard to pinpoint in the consumption situation (McDonagh 2017) or the capitalist psychology where the free market is seen as the most efficient way to allocate resources and the ideology builds on a notion of infinite growth in an infinite system (Kilbourne and Mittelstaedt 2012). Thus, the freedom of choice and responsibility for it of consumers exists within the context of the dominant social paradigm (DSP) or the system in which a consumer has been born and socialized. As basic values and

habits are mostly taken for granted and not questioned e.g. conforming to the rules of society (Kilbourne and Mittlestaedt 2012: 290), it is hard for people to grasp the material trap built into the system, which acts as an effective barrier for a bigger systemic transformation and adopting green consumerism (McDonagh et al, 2014).

The material trap is the outcome of the ideology of consumption, which reinforces profligacy, maintaining the legitimacy of the modern capitalism and thus the DSP of Western Society. The material trap is described as the outcome of material values: Materialism has been seen as the outcome of nurture rather than nature, e.g. that we are socialized into a materialistic system since we are born (Rindfleisch et al, 2009) and that the exposure to materialistic messages and imagery is continuous via different socialization agents (Shrum et al, 2005). According to resent neurological research (see Rochat 2010 in Burroughs and Rindfleisch 2012) it is argued that materialism may be at least partially innate, which signifies that materialism is both part of our DNA and our social development. In other words, we might have an inbuilt need for material possession based on our basic instincts to stay alive, which in today's world leads us to answer to any kind of challenges in life with material solutions, e.g. consuming more. "*While material objects are necessary for survival, they are of very limited value in satisfying higher order needs, yet humans often persists in trying to use objects for this purpose*" (see Diener and Biswas-Diener 2008, Kasser and Ahuvia 2002, Myers 2008 and Wong et al, 2003 in Burroughs and Rindfleisch 2012: 256 – 257).

Thus, it seems contra dictionary that the responsible consumption choices are seen as rational, individual decisions: "*In the neoliberal logic, all responsibility must thus be shared within a society of economically rational actors "…"whose moral quality is based on the fact that they rationally assess the costs and benefits of a certain act as opposed to other alternative acts. As the choice of options for action is, or so the neo-liberal notion of rationality would have it, the expression of free will on the basis of self-determined decision, the consequences of action are borne by the subject alone, who is also responsible for them*" (Lemke 2001: 201 in Giesler and Veresiu 2014: 842). As argued by Giesler and Veresiu (2014) it seems that the responsible consumer of today is the scapegoat for the sustainable transformation that isn't happening, at the same time as corporations continue business as usual and social (political) decisions follow the lead of the economic forces, all tied to the ideology of eternal growth.

Above logic resonates with the barriers to sustainability transitions described by Geels (2011: 25) in that the contemporary market mechanisms do not support private actors to compete about becoming the most sustainable (yet), leaving it to

the public policies to solve this systemic issue. Sustainable goals do not offer direct benefits to businesses and ecological innovations have trouble penetrating markets, this also links directly to the economic frame conditions of current socio-technical systems. Big firms are on the top of current food, transport and energy systems and their business logic is tied to the growth imperative, making them 'rulers of the regime'.

Consumers are receiving a myriad of information about sustainable consumption choices, green products and responsible lifestyles, still responsible transformation of global consumption and production has this far been more a question of green painting (Yngfalk 2019) rather than actual transformation into greener societies, e.g. changes reflecting upon the entire system. It seems logical to agree with Varey (2012: 431) on that "*overconsumption, rich-poor divide and ecological disaster are not going to reach a solution using the same tools that has created them and sustainability used as a tool for traditional marketing theory will not satisfy the need for a systems change.*"

2.1.5 Marketing systems theory

Marketing systems theory (Layton 2007, 2008, 2011, 2015, 2017) proposes that markets as systems can describe social evolution of a collective. Their origin lies in the trade imperative, where individual actors realize that gains are possible through specialization (Layton 2011: 260). Following figure (Fig. 5) explains the major components of the system.

Marketing systems are considered multi-level, path dependent, dynamic systems, embedded within a social matrix, and interacting with institutional and knowledge environments (Layton 2011). "*A marketing system is a network of individuals, groups and/or entities, embedded in a social matrix, linked directly or indirectly through sequential or shared participation in economic exchange, which jointly or collectively creates economic value with and for customers, through the offer of assortments of goods, services, experiences and ideas, that emerge in response to or anticipation of customer demand*" (Layton 2007: 230). The effectiveness of a marketing system can be measured by the increase in the quality of life to the communities that benefit from it and also the negative effects, the so called unsustainable outcomes or externalities.

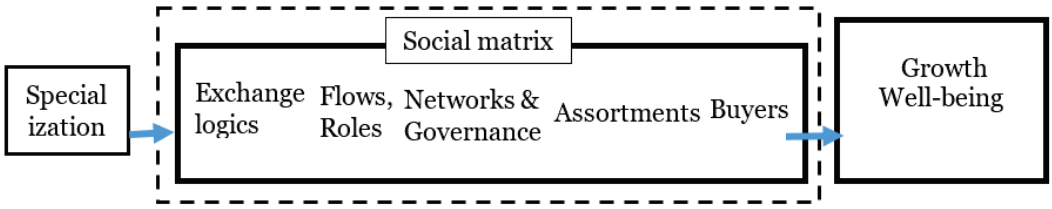

Figure 5. The major structural and functional elements of a marketing system (Layton 2011: 267)

The marketing system framework enables a systems perspective upon the output of a certain network of exchange. Marketing systems interact with each other, there are big major networks and smaller formations that might be highly dependent upon the macro-level network. Focusing upon the highest level of marketing systems (Kemper and Ballantine 2017) involves the roles and relationships between retail chains, manufacturers, wholesalers, produce markets, producer groups, consumers and stakeholders. Thinking about marketing systems like a Russian doll might give an idea of the possible complexity and interconnectedness between systems. If we consider this in the context of energy, and how one of the mega marketing systems would be the global oil trading system, directly connected to national level systems of exchange and with multiple, more specific marketing systems dependent on the first. Not only has this system an impact on the flow of the raw material, the oil, and big business, but it has evolved into a network affecting global treaties and politics that have a direct impact upon the lives of most people on earth.

Marketing systems are also social systems where path dependence will always be found (Layton and Duffy 2018). The reality is always messy and complex, but capturing so called causal dynamics, where primary and secondary complex social mechanisms work, is central for tracking the formation of links within and between levels in a micro-meso and macromarketing system. The two primary social mechanisms affecting the formation process are self-organization and emergence. From the emergence of an event (originating from technology, changing values, politics, the economy, the natural environment or a new entrepreneurial innovation), 'the cause', and its entering into the marketing system, the individual choices regarding this new stimuli become collective choices that effect the outcome or system output. Thus, '*each individual decision will reflect a changing personal or collective blend of self-interest, mutuality and morality, drawn from experiences made in the past…each and all contributing to the framing of the choice, limiting some options and enhancing the likelihood of others"* (Ibid. 2018:

403). Following this logic, path dependence (and lock-ins) are generated in social settings where the social mechanisms have an important role to play.

This is a highly simplified explanation of the entire research on social mechanisms in the causal dynamics of marketing systems undertaken by Layton and Duffy (2018). The main take away for the work undertaken in this thesis, is the recognition and explanation of the workings of mechanisms behind the 'invisible hand' in the marketplace, or the power of socio-cultural-cognitive forces affecting the output of socio-material (socio-technical) systems. This way, a marketing system can be seen as the big picture that shows the exchange and its flows in a socio-cultural-technical context and explains the workings of complex social mechanisms. As it explains the social mechanisms as feedback dynamics, involving the individual choices of participants, it lays out a base for the further exploration of material-institutional-habitual, socio-culturally inscribed, logics at work in a system. Taking the view of this thesis, rational energy myths and their relation to timeless mythologies are considered "paradigm pathways", intangible structures within the collective mental models. Due to their ubiquitous and taken for granted status, they are powerful means of directing the evolutionary process, as "*each participant choice is a continuing evolutionary moment in the life of a marketing system" (*Layton and Duffy 2018: 403*).* As each participants choice is embedded in the legitimized institutions of their socio-cultural environment (socialized into a socio-cultural context), thus maintaining and being maintained by the collective system of mental models, normalized beliefs and habits are hard to alter as they are the main pillars of the current regime. In other words, they might keep the feedback in a loop. And as mindsets, tied to habits, that have become institutionalized and normalized, these mental models of how things ought to be, create and maintain lock-ins (Haase et al, 2009). Adhering to the focus of this thesis to explore intangible drivers in energy transitions, the marketing systems framework is used in collaboration with the earlier presented MLP framework. This is explained in section 2.3 where I introduce the energy agora framework.

2.2 Myths and Mythologies

"*There are two types of human beings. There is the animal human being who is practical and there is the human being who is susceptible to the allure of beauty which is divinely superfluous. THIS IS THE DISTINCTION. This is the first germ of a spiritual concern and need, of which the animals know nothing*" (Campbell 1990: 6).

The changes required in transitions are often of such large scale and the actions needed sometimes so radical that they freeze the mind of people (Gifford 2011, Stoknes 2014), leading to denial and resistance even if there is an obvious need for action. The concepts of myth and mythologies might prove useful when creating more understanding about intangible, socio-cultural-cognitive dynamics in (energy) system transitions. The effects of the collective, institutional beliefs often remains opaque in day to day interactions and decisions, as individuals have been socialized into taking them for granted (Kilbourne et al, 2009). Exploring the underpinning expectations of reality tied to dominant myths and their mythological "roots", might help us shed light upon the ubiquitous workings of the dominant social paradigm (DSP) and how it shapes transition trajectories.

2.2.1 Myths

A myth is a story, presented as having actually occurred in a previous age, explaining the cosmological and supernatural traditions of a people, their gods, heroes, cultural traits, religious beliefs, etc. (Leach & Fried 1984: 778 in Mark 2018).

"*Myths are a culture's body of hereditary stories that make up a mythology, whose roots lie in the primal seasonal and biological narratives about the recurrent life cycle of birth and death*" (Stern 1995: 165). Myths provides the reader and listener with meaning, they tell the stories of ancestors and the origin of humans and the world (Campbell 1973: 3-4) according to psychiatrist Carl Jung, they are necessary aspects of the human psyche to help it find meaning and order in the worldly chaos (Mark 2018).

Myths and mythologies permeate consumer culture, advertising and mass media freely draw from mythic archetypes and plotlines to create compelling stories, characters and promotional appeals (Humphreys and Thompson 2014). Analysis of consumer myths have primarily drawn from the structuralist tradition and the focus on archetypic characters and story lines or plots. "*Myths are ways of organzing perceptions of realties, of indirectly expressing paradoxical human concerns which affect people's daily lives*" (Levy 1981: 52). Thompson (2004) has developed the construct of marketplace mythology to make the intersecting discourses of power more visible and to understand how social and institutional shifts occur. Here, the idea is that mythic archetypes are grounded in the fundamental concerns of human experience. There is a difference between mythic archetypes that exist across cultures and how they serve national ideological purposes (Ibid. 2004: 162-163). Thus cultural myths are used to create certain marketplace mythologies that serve competing interests and ideologies.

2.2.2 Mythologies

The term mythology denotes both the study of myth and the body of myths belonging to a particular religious tradition (Bolle et al, 2020). Mythology is the study and interpretation of often sacred tales or fables of a culture known as myths or the collection of such stories which deal with various aspects of the human condition: good and evil; the meaning of suffering; human origins; the origin of place-names, animals, cultural values, and traditions; the meaning of life and death; the afterlife; and the gods or a god (Mark 2018).

An alive mythology concerns the pedagogy of the individual, giving him a guiding track to guide him along, it coordinates the living person with the cycle of his own life, with the environment in which he is living, and with the society which itself has already been integrated in the environment. *Defining a myth as an order of acceptable ideas concerning the cosmos and its parts and nations and other human groups keeps it at the level of ideology. It misses out on the mystic dimension that informs all this, the "I" outside and inside the individual, the one who sees.* (Campbell 1990: 47).

What differs a mythology from an ideology? Does the above statement by Campbell (1990: 47) mean that marketplace mythologies told by consumers are more like ideologies, set and told in a socio-cultural context, as dead story that won't let the individual inside? People who grow up in Western society, are socialised into a socio-cultural environment where each atheist and believer shares the same institutional structures, constructed throughout centuries. Western culture has originated in Europe and has been most influenced by the Greco-Roman and Christian cultures (Perry et al, 2012). Thinking about religion as institution, and that beliefs are tied to the structures of a certain worldview, the mythical roots of our modern Western society go far away in time. Referring to Campbell (1990: 46) "*I would say there's no conflict between mysticism, the mystical dimension and its realization, and science. But there is a difference between the science of 2000 B.C. and the science of A.D. 2000. And we're in trouble on it because we have a sacred text that was composed somewhere else by another people a long time ago and has nothing to do with the experience of our lives. And so there's a fundamental disengagement".*

What does this imply? To explain the old roots to our Western mythical 'toolkit' (e.g. cultural toolkit see Zilber 2006) it is useful to compare old mythologies from two different cultures. Campbell (1990: 28-29) does this comparison between the famous speech given by native American Chief Seattle around 1855 and the Genesis 3 (the fall from Eden in the Bible). He explores the difference between the two texts, referring to the Genesis 3 as a text that speaks of man as superior to

nature, man's mastery over nature as something that has been given to him. Campbell (1990) then compare that with the words of Chief Seattle, spoken from the perspective of man as part of nature and creation. The difference, he argues, lies in the native mythology positioning the individual as an active co-creator whilst genesis makes him/her a passive receiver (taker). The latter refers to mythology as a petrifaction, something that has dried up, is dead, and is not working, and the first mythology as something that is working. The work of mythologies happens at the subconscious level, not at rational level. When the mythology is alive, you don't have to tell anybody what it means. "*The myth must work, like a picture. It can be explicated if you've already experienced it, interpreted and amplified, and so forth; but it must work. And we've lost it"* (Campbell 1990: 46-47).

There is a difference in these worldviews, one allows the listener in as an active doer and part of a whole, the second tells the listener how things are and that their action is required by the one grater force above them, making the individual passive or outside creation. As if all has already been revealed and there is no discovery or individual path to take, you just follow the rules. People in the dominant social paradigm of Western society (DSP) are socialized into cultures embedded in the old structures of monotheistic patriarchal worldviews Greco-Roman and Christian cultures (Perry et al, 2012). Our actions upon nature, animals and other nations are embedded into the dominant worldview (Kilbourne & Mittelstaedt 2012: 293). These ponderings do not imply that individuals are conscious of these structures, nor religiously inclined. One could ask, which of these timeless mythologies supports an individual in taking responsibility for oneself and the collective from a perspective of belonging, and which makes the individual alone and incapable of affecting things outside themselves? As history has shaped the modern socio-cultural institutions, it affects our social structures and beliefs about reality (Perry et al, 2012). Thus, it might be useful to consider the mythological roots of the national and rational (energy) myths as something unquestioned but still present.

2.2.3 Connecting myths, mythology and DSP

An alive myth, the function of the ritual and the myth is to let you experience it here, not somewhere else a long time ago (Campbell 1990: 46). The difference between mythology that is alive or a petrifact (e.g. dead) and their connection to the DSP are further elaborated upon by including three short discussions.

Firstly, in Klein's (2013) article she has interviewed writer, spoken-word artist, and indigenous academic Leanne Betasamosake Simpson about extractivism and why

it's important to talk about memories of the land. This short story demonstrates the clash between the circular (belonging to the bigger picture) and linear (outside creation) as worldviews. *"Extraction isn´t just about mining and drilling, it´s a mindset-it´s an approach to nature, to ideas, to people… Extraction and assimilation go together. Colonialism and capitalism are based on extracting and assimilating. My land is seen as a resource. My relatives in the plant and animal worlds are seen as resources. My culture and knowledge is a resource. My body is a resource and my children are a resource because they are the potential to grow, maintain, and uphold the extraction-assimilation system. The act of extraction removes all of the relationships that give whatever is being extracted meaning. Extracting is taking. Actually, extracting is stealing-it is taking without consent, without thought, care or even knowledge of the impacts that extraction has on other living things in that environment. That has always been a part of colonialism and conquest…*

This idea of extractivism and the way its logic is inherent in colonialism and later capitalism, is central to the DSP discussion. It also brings up the notion of the mechanistic worldview, the world as a clockwork where each part can be described and measured separately (Sheldrake 2012). The idea of the world as something that can be controlled by separating it into bits and pieces has paved way for specialisation and thus, the power is in the hands of the experts. "*The institution of interest is the Baconian principle that science is for the purpose of bettering (increasing) the material conditions of existence through the judicious development of technology that forces nature to yield its assets to mankind, which results in the reductionists transformation of nature from intrinsic to instrumental value in service to humanity and separates humans from nature placing them above it. This is the move that Merchant (1980) refers to as "death of nature". Once nature is transformed from an organic unity within which human development takes place to a mechanical device that is controlled by humans in developing the material conditions of existence, the human relation to nature is transformed. This creates new habits of thought and behavior toward nature that become an integral part of the new institutional structure of Western industrial societies" (Kilbourne & Mittelstaedt 2012: 293).*

Finally, we can reflect the earlier texts to the one spoken by climate activist Greta Thunberg (2020): "*Today leaders all over the world are speaking of an existential crisis". The climate emergency is discussed on countless panels and summits. Commitments are being made, big speeches are given. Yet, when it comes to action we are still in a state of denial. The climate and ecological crisis has never once been treated as a crisis"* (Thunberg 2020).

Could it be, that the DSP of Western societies, even as it has its focus upon the individual, by making the individual a consumer, has taken away the power of creation? A consumer can (legally) affect collective outcomes either by consuming and voting for politicians (other consumers) to make good decisions. When a consumer votes, it is in the role of a citizen (preferably concerned citizen) but the socialisation into consumer culture means that the dominant mindset is still tied to the DSP. And if the culture of worship strips the individual of personal tools to be the creator if life, it gives the power to a force outside the person. So, who is ultimately going to do something as the responsibility in the hierarchy can always be given away to another? And 'the other' is hidden in the anonymity of the institutionally legitimized structures which in the DSP are heavily reliant upon the idea of expertise. The dominant social paradigm might be pictured as an old wall that has been constructed for a long time, always putting on a new layer. This means that de-construction is difficult as the layers depend upon the one beneath. Breaking a paradigm is really blowing up the entire wall and creating something new. But, as this is a psychological question it becomes much harder as it means losing one's personality (Campbell 1990: 93).

2.2.4 Myths as translation

Cultural mythologies exert a significant influence on the stories consumers tell and, hence, the meanings they ascribe to their experiences. The construct of marketplace mythology "*offers a critical logic for exploring how cultural myths are leveraged to create distinctive marketplace mythologies that serve diverse, and often competing ideological interests*" (Thompson 2004: 162-163).

Each culture contains different meaning systems (Friedland and Alford 1991) from which its members can borrow, mold, and recreate specific rational myths (Zilber 2006: 298). Meanings are not replaced, but rather selected, reshaped and appropriated, that is translated over time in relation to economic fluctuations… Exploring institutionalization dramas through their ideational (meaning construction) facets may help understand them better (Zilber 2006: 298, 300).

Approaching myths and mythologies from an institutionalization as translation perspective makes it possible to explore core (DSP) meaning constructs compared to different meaning systems in the contemporary culture. So called rational myths tell us about how current reality is structured and allows for theorization about the mythological constructs behind the dominant meaning system(s). Rational myths like culture in general, should be understood as comprising a "tool kit" (Swidler 1986 in Zilber 2006), they are rhetorical and symbolic resources that social actors use and interpret dynamically, rather than a given and objective entity in an

institutional environment. As an example, Syrälä et al, (2014) have used discourse analysis to capture cultural and social interactions in everyday practices connected to poverty. Their findings are illustrated as a stretch of "cultural DNA" that includes various constructs of discursive practices negotiating and reproducing life in poverty. Authors (Ibid. 2014) show how culturally inscribed constructs regarding money are reproduced by consumers in vulnerable positions providing structures of poverty.

Considering the earlier perspective about mythology that is alive or dead, one that makes the person participating in the mystery and the other giving her the role of a worshipper. It might be suggested that there is an interrelationship between mythology, myths, marketplace structures, and the interpretive predilections of key consumer constituencies (Thompson 2004). "*By extension from this primary religious meaning, the word myth may also be used more loosely to refer to an ideological belief when that belief is the object of a quasi-religious faith… While the outline of myths from a past period or from a society other than one's own can usually be seen quite clearly, to recognize the myths that are dominant in one's own time and society is always difficult… because a myth has its authority not by proving itself but by presenting itself. In this sense the authority of a myth indeed "goes without saying"* (Bolle et al, 2020).

The social constructionism (Berger and Luckmann 1967) refers to the process where habits become legitimated ways of doing and thinking in a society. In a way, that nobody questions the reason for their existence. If we bring this idea to the field of transition processes, considering path dependence or lock-in as mental models, and the call for reflexive modes of governance: "*How reflexive planning processes which are embedded in traditional governance patterns may easily fall back into more traditional, linear planning practices and their orientation towards sustainable development may become superseded by dominant discourses about economic growth and competitiveness" (Scrase and Smith 2009).* Could it be, that we are dealing with very old belief structures that make the paradigm shift such a challenging process, as they are tied to the collective subconscious (Thompson 2004, Sheldrake 2012) or our "cultural DNA" (Syrjälä et al, 2014). Exploring dominant myths in the Finnish energy agora, and connecting them to national myths and timeless mythologies, might help us to capture something of these deep drivers of mental models.

2.3 The Energy Agora Framework

The renewable energy marketplace – the Energy Agora - can be seen as the traditional square (see Fig. 6); a meeting place, where different interests and goals of various stakeholders are represented as myths that either try to reinforce or transform (challenge) the current energy regime (Geels 2004). Here we keep in mind that each actor also is a carrier of institutions (Zilber 2002) and that one actor can have many roles across the different levels. The agora, is also the place where different marketing systems intertwine as the actors meet and network. As we have learned in earlier chapters, marketing systems are multi-level, path dependent, dynamic systems, embedded within a social matrix, and interacting with institutional and knowledge environments (Layton 2007, 2011, Layton and Duffy 2018). As the focus is on how to further the energy transition towards sustainability, this framing also includes the multi-level perspective (MLP) comprising landscape, regime and niche levels (Geels 2004, 2020).

Energy transitions have been approached from different research perspectives and levels which can crudely be divided into the grassroots – micro-level including citizens, consumer, prosumers, local and communities, the midlevel actors - meso-level including technological, business development and NGO's (niche innovators could be considered as part of the meso-level) and the institutional, governance perspective – the macro-level. Specific kinds of barriers exist for the different levels, as well as there are systemic issues affecting all actors in a socio-technical marketing system. Here, using the energy agora framework, the focus is upon the intangible structures embedded in the social matrix of such systems. Hence, we approach the social workings in the energy agora through discourses treated as myths. Institutional structures and thus consumption systems, are reinforced or challenged through discourses (Kilbourne and Mittelstaedt 2012, Varey 2012, Giesler and Veresiu 2014, Yngfalk 2019), where the most powerful ones become marketplace myths, strengthening public perceptions of what is considered acceptable or not (Humphreys and Thompson 2014).

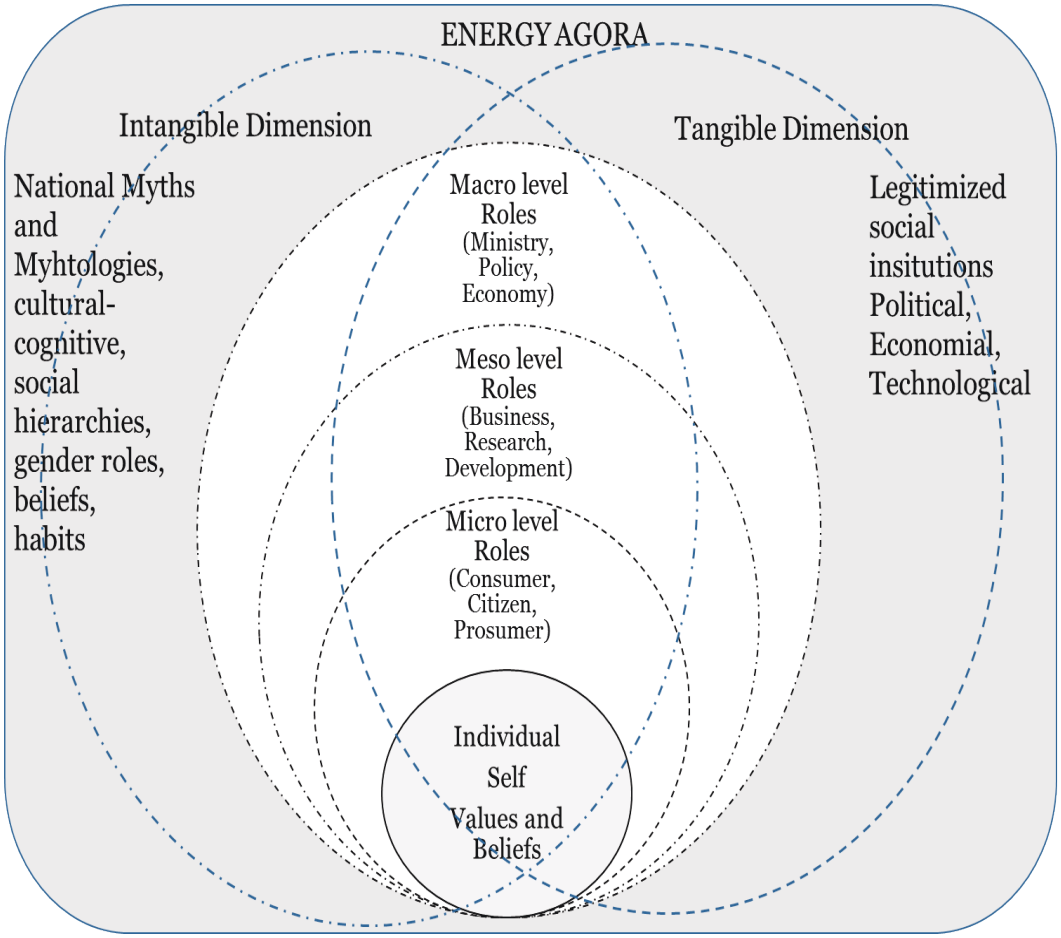

Figure 6. The Energy Agora Framework

The energy agora framework (Fig. 6), approaches transition dynamics from the perspective of the ancient agora as the local square – the place where different 'actors as carriers of institutions meet. According to the notion of the ancient agora, this was where historically all administrative, legislative, judicial, commercial, social and religious activities took place (Mittelstaedt et al, 2006). Drawing from the idea of the public square, the energy agora framework sees participants in a socio-technical marketing system as actors in three levels of energy transition roles: Macro - governmental, meso - business and micro – consumer or citizen. Thus, these actors are representing different societal roles, which draw from the aforementioned layers and are brought together in the agora. The energy agora is a multi-layered framework connecting with the social matrix of a marketing system (see Layton 2007), also referring to the technological as well as geographical dimensions where it is immersed, more precisely the socio-technical regime and niches as well as the landscape.

To elaborate a little bit further on where the agora should be placed, we can start with seeing it as the central square of an ancient city. The city and its surroundings can be viewed as a multi-level socio-technical (energy) system comprising landscape, regime and niche. In the agora, different actors with different societal roles (micro, macro or meso) and who belong to various marketing systems meet and network. Thus the agora is the place where actors as carriers of institutions interact and work to maintain or challenge the regime. As in the ancient agora, the communication is undertaken through discourses that interact with expectations and rules embedded in the intangible and tangible structures of the legitimised institutions.

Thus, there are two dimensions to the energy agora framework; the tangible and intangible (see Fig. 6). Firstly so called tangible dimensions: The legitimised social institutions of a socio-technical marketing system include political, economic and technological structures, expressed by rules such as legislation and policy. These legitimised, institutionalised structures maintain the social order and functions in a socio-technical energy system and thus make the tangible rules that the actors need to follow in all their interactions. The other dimension; 'intangible dimensions' refers to socio-cognitive constructs and is tied to values, beliefs, ideologies and habits. This dimension is harder to measure as it reflects the individual mindsets and how they relate to the collective 'rules' of action. As an example, a vast amount of previous consumer behavior research indicates that consumers have favorable attitudes towards sustainable consumption choices, but their actions do not reflect these good intentions (McDonald et al, 2012, Black 2010). This difference, the so-called 'green-gap', seems to concern consumer's energy behavior as well. By solely measuring opinions and values (towards renewable energy solutions) we might miss out on the socio-cognitive and cultural structures into which individuals are socialised (and embedded). The deeper social structures are tied to paradigms – worldviews, representing complex systems of habits, practices and inherited belief-systems. This is where the notion of energy myths and mythologies is used to explore path dependence and lock-ins as mental models. In this study, the energy agora framework is used to gather the dominant myths in the socio-technical energy marketing system.

3 METHODOLOGY

This chapter introduces the methodological and philosophical underpinnings of this thesis. Firstly, we discuss the philosophical antecedents to the research. Secondly, the methodological choices and the research method(s) are presented followed by the third part regarding choices in data collection and analysis. Finally, we assess the overall research quality. This thesis consists of three essays, which are based upon discourse analysis informed by social constructionism. This chapter will focus upon the methodological choices and research process of the essays as well as the paradigmal underpinnings of the energy agora framework presented in the 'kappa'.

3.1 Research paradigm and methodology

Marketing scholars need to be aware of the philosophical assumptions (paradigm) embedded in their research output, because all research is underpinned and delimited by a particular stance toward the world they study (ontology) and how this is investigated (epistemology) which, in turn, influences the methodology used to seek knowledge (Tadajewski 2004: 307).

Paradigms represent a distillation of what we think about the world (Lincoln and Guba 1985: 15) and therefore have its own distinctive language, which offers a unique means of classifying and construing the objects encountered during scientist's engagements with world (Johnson and Duberley 2000: 69 in Karataş-Özkan and Chell 2010: 58). Tadajewski (2004: 308) refers to the work by Kuhn (1962: ix) who defined a paradigm as 'universally recognized scientific achievements that for a time provide model solutions to a community of practitioners'. The four paradigms presented by Burrell and Morgan (1979) (see Tadajewski 2004: 308-309, Karataş-Özkan and Chell 2010: 58) are the *functionalist/positivist, interpretive, critical/radical humanist* and *radical structuralist*. Thus, the *philosophical underpinnings* are 'grouped' regarding to core assumptions of *ontology, epistemology, human behavior and methodology and viewed along a dimension of objectivity to subjectivity* (Morgan and Smirchic 1980 in Karataş-Özkan and Chell 2010: 58). Ontology concerns the nature of being, our ontological positioning in research stems from the objective and subjective assumptions that we make about the nature of reality (Eriksson and Kovalainen 2008, Karataş-Özkan and Chell 2010). Epistemology is about what we can know, the nature of knowledge and the distinction between knowing and believing or opining (Chell and Pittaway 1998 in Karataş-Özkan and Chell 2010). Epistemology comprises assumptions about what constitutes knowledge and how

it relates to the current focus of the investigation. The positivist view sees the world as an external and objective reality whilst again a non-positivist world-view entails the examination of experiences of individuals who construct their reality (Denzin and Lincoln 1998). In marketing studies the divide has been between the traditional positivist (free of subjective influence) and 'post-positivistic', interpretative, constructionist and humanistic views (social reality subjectively re-created) – the so called 'interpretive marketing research' (see Tadajewski 2004: 317

Methodology pertains to the question of how we can generate knowledge. It concerns use of methods to generate knowledge of human behavior or the social world. The researcher's ontological and epistemological assumptions and human behavior positioning guide their choices of methods, 'their methodological assumptions', to create knowledge and inevitably the type of knowledge (Eriksson and Kovalainen 2008). A positivist view of the world conveys a belief of the social world as external and objective reality. A non-positivist world-view entails the examination of experiences of individuals, who create, interpret and manipulate their reality. The knowledge generated will be concentrated on what is unique to individual experiences rather than what is universal or general (Karataş-Özkan and Chell 2010: 59). The three approaches used to conduct research are Inductive, deductive and abductive. The inductive reasoning (starting form a blank page), commences with observation of specific instances, and seeks to establish generalizations. The deductive approach starts with generalizations, and seeks to see if these generalizations apply to specific instances. Abductive is a combination of the both earlier (Hyde 2000).

Thus, the approach in this thesis is between interpretive and critical humanist in 'the social constructionist paradigm'. To answer the ontological assumptions of nature of reality, this thesis sees reality as socially constructed and emergent. It approaches the question of epistemology 'what can be known of these realities and what is the relationship between the knower and the known' by adhering to the perspective that knowledge of the social world is produced and sustained through certain social processes in certain cultural and historic contexts. It participates in the post-positivistic – interpretative marketing research and uses qualitative discourse analysis as main methodology. This thesis follows the inductive process as it has started from observations, data gathering and seeks to establish certain generalizations.

Social constructionism as research paradigm, proposes that members of any social system enact their particular worlds through social interaction where ideas, concepts and beliefs are discussed and shared with others. Reality is thus a social

product, which cannot be understood apart from the co-constructed meanings of the social actors involved in its enactment (Berger and Luckmann 1967). Social constructionism is one of the epistemologies of social sciences, which does not assume any pre- existing reality (Karataş-Özkan and Chell 2010). The social constructionist paradigm provides us with 'a frame of reference' (Watson 2003: 1321) with a set of assumptions about the nature of reality, the 'known' (ontology), the nature of the relationship of knower to known (epistemology) and some ways of designing a social research (methodology). Hence, a particular way of viewing these interrelated notions of ontology, epistemology and methodology is embedded in the social constructionist premise. Lincoln and Guba (1985) describe their naturalist version of epistemology; in their understanding, the inquirer and the 'object' of inquiry influence each other and therefore knower and known cannot be divorced from each other.

In social constructionism view, social objectives are not given in the world, they are constructed, negotiated, reformed and fashioned and organized by human beings in their efforts to make sense of happenings in the world. Culture and cultural practices are central to social constructionism and they are produced and sustained through the use of stories. People construct their own reality especially by symbolic meanings that are expressed by words and thus discourses (Berger and Luckmann 1967: 40). Each individual belongs to a tangible reality and social context that is constantly maintained by language, communication to others. Language has enormous power to present an entire world into a given moment, making present a variety of objects that are spatially, temporally and socially absent from the here and now. However, it also forces the speaker into its patterns, the 'rules of words of a language' (Gergen 1985). As language translates knowledge, and knowledge can be considered as socially distributed, we have actors with different knowledge roles such as doctors, lawyers, engineers who belong to certain spheres of knowledge with their own language systems. The social distribution of knowledge simply starts with the fact that 'I do not know everything known to my fellowmen and vice versa', and culminates in exceedingly complex and esoteric systems of expertise (Berger and Luckmann: 46) as legitimized, institutional structures.

Research inspired by critical theory assumes, like the interpretative paradigm, that social that social reality is socially manufactured and re-recreated, but asserts that individual consciousness is dominated and subservient to ideological superstructures. These imprison the individual and the role of critique is to describe the alienating forces and societal arrangements that impinge on individual agency and consciousness in society so that 'human beings can transcend the spiritual bonds and fetters which tie them to existing social patterns

and thus realize their full potential' (Burrell and Morgan 1979: 32 in Tadajewski 2004: 319). Criticism, thus functions to raise consciousness and encourage a transformation of the social world, particularly the one-dimensionality assumed to accompany contemporary capitalism (Burrell and Morgan 1979: 318, Nurton 2001: 726 in Tadajewski 204: 319).

Reflexivity in social constructionism, there is an acknowledgment of the differential perspectives in the interpretation and observation of social phenomena, 'there is no value free science' so to say. This puts additional demands on the researcher who's own constructions are viewed as narratives, shaped by and expressing the social, moral, political, philosophical and other concerns of the researcher. Awareness of, and reflection on, these concerns as well as how the researcher is situated with regards to their research participant, are crucial in social constructionist research (Karataş-Özkan and Chell 2010: 63). This is a central issue in assessing the reliability and validity of the research and will be discussed further in section 3.3.

3.1.1 Outline of the research process

The aim of this thesis is to gain more understanding about how institutional logics are represented and translated through so-called rational energy myths. It explores and discusses the role of collective mental models in the path dependence inherent in energy marketing systems. Earlier research, using the marketing system approach combined with the MLP to explore intangible, socio-cognitive drivers of transition dynamics, is sparse. Thus, the choice of qualitative approach is suitable as it enables the researcher to dive deep into the context and phenomena (Yin 2004), in this case the field of energy transition. Marketing and socio-technical (energy) systems are (in) famously path dependent with lock-ins at technological, institutional and behavioral levels (see chapter 2). Institutional rigidness has been studied from various perspectives, but approaching it as the outcome of path dependency and lock-ins as mental models has received less attention (see Haase et al, 2009 and Layton and Duffy 2018).

The studies for this doctoral dissertation were initiated in January 2014; the first 3 years (2014-2016) the researcher was also assisting in creating a cross disciplinary energy transition research team, as well as preparing national and international project proposals in the field of renewable energy and sustainability. Preparing various project proposals for both Finnish and EU (H2020) calls, as well as the participation in various energy related research projects, has allowed for a personal immersion into the complexities of energy socio-technical marketing systems, viewing both the consumption and production sides of it. The first years

of being out and about talking to engineers, policymakers, researchers and consumers and above all, observing, directed the research interest towards the need for understanding systems instead of individual actors. This is where marketing systems and sustainability transitions were chosen as larger frameworks. These systems perspectives still didn't explain the sustainability gap of transformation towards truly sustainable systems – and the talk in the energy field seemed stuck in the growth above all logic – the so called neo liberal agenda. The researcher's personal interest of how to make the leap to sustainability as well as background in consumer behavior studies led to consider the micro-macro questions, e.g. how the individual's worldview is connected to the collective and vice versa. Thus the critical marketing perspectives of the responsibilization of consumers (Giesler and Veresiu 2014, Humphreys and Thompson 2014) and the dominant social paradigm (Varey 2012) seemed to open up promising paths to enter the ubiquitous world of socialization and legitimization. The problem was still how to explore something intangible, the silent, collective, culturally constructed agreements people might not even be aware of? This question led to the paradigm of social constructionism and the world of discourses and myths. Myths and mythologies seemed to be the bridge between the mundane and non-mundane, and this having been used by marketing professionals for successful cultural branding (Holt 2004). The challenge in approaching multi-level socio-technical marketing systems is that the material – non-material, tangible – intangible divide becomes blurred. Technological solutions drive ideas of what is possible or not, but with the technological innovations comes (big) economic investments and interests, thus there are several worldviews, mostly positivist functionalist oriented, operating as a background paradigm for the social system. Critically, one might ask, is technology dictating humans or are humans still masters of technology?

Thus, the three essays have served as a road for exploration. Following the logic of inductive research process, the findings from the first essay led to more insight into what to look for in the second essay, and finally how to approach the mythical constructs in the energy marketplace in the third essay. The research process has required the researcher to reflect (a lot) upon her own constructions, something considered critical in social constructionism (Karataş-Özkan and Chell 2010) and the naturalist way of epistemology (Lincoln and Guba 1985). This has been important in the collection of data, especially for the second essay, as it was conducted during meetings and workshops where the researcher participated as facilitator. To maintain as much objectivity as possible and to keep from interfering with the way the participants expressed themselves about renewable energy and the energy transition, the researcher stuck to the questions outlined for the needs of the project. Still, as the personal stance of the researcher is leaned

towards critical sustainability, the worldview and choices, both conscious and unconscious, are colored by this perspective. To make sure to keep the interference at minimum, most of the data was collected from public events where the researcher participated as listener and observer (recording the talk). Thus the reflexivity issues have been important to keep in mind during the actual processes of discourse analysis.

3.1.2 Qualitative discourse analysis

Language originates in and has its primary reference to everyday life; it refers above all to the reality 'I' experience in wide awake consciousness, which is dominated by the pragmatic motive (that is the cluster of meanings directly pertaining to present or future actions) and which I share with others in a taken for granted manner (Berger and Luckmann 1967: 38). *Discourse analysis is just one among several social constructionist approaches but it is one of the most widely used approaches within social constructionism* (Jørgensen and Phillips 2002: 4).

In choosing a discursive approach, discourse analysts explore how structured sets of texts come to function as reality constructors, which help constitute the social phenomena in question (De Cock et al, 2005: 38). To make sense of the social reality and meaning created, it is critical to take into account the context in which the texts are produced and collected. The extent to which the local, social or broader context needs to be taken into account is informed by the theoretical underpinnings of the approach to discourse analysis chosen for the research project (Salignac 2012: 128). Ontological underpinnings to discourse analysis assume reality as a social construction, as opposed to a concrete structure in the positivist tradition (Morgan and Smircich 1980). *"Available discourses guide and constrain the way that a phenomenon, person or topic can be meaningfully discussed and reasoned about, and define acceptable and intelligible ways of conduct with respect to it"* (Moisander 2001: 115).

Social change takes place through dialectical interconnections between existing structures and the strategies of social agents and agencies to sustain or transform structure. Strategies have a discursive moment – part of what distinguishes one strategy form others is its particular configuration of discourses and narratives, narratives which connect the present and the past with predicative and prescriptive imaginaries for the future (Fairclough 2006 and Jessop 2002 in Fairclough 2007: 12). Thus, discourses are considered as "*part of social process, as social practice, affected (determined) by social structures, with reproductive effects on those structures either sustaining or changing them*" (Fairclough 2000:

135). Dialectical relations refers to the relation between discourse and other facets of social phenomena (Harvey 1996). Discourse is as one part of six distinctive and dialectically related moments of the social process: discourse, power, beliefs and values and desires, social relations, institutions and rituals, and material practices. The relations are dialectical in the sense that each moment is constituted as an internal relation of the others, thus discourses internalize (embody) in some sense everything that occurs as other moments. Internalization is always a translation or metamorphosis rather than an exact replica or perfect mimesis. A gap always exists between different moments, which is why no totalitarian attempt to set up social life can fully succeed. The actions of social agents (actors) and agencies (roles) are conditioned and constrained by existing structures, actions produce and reproduce structures, and actions can transform structures (Fairclough 2007: 10-11).

3.2 Empirical data collection and analysis

This dissertation aims to gain a deeper understanding of intangible, socio-cognitive drivers in energy transitions, where previous empirical research is sparse, thus motivating a qualitative, explorative approach (Yin, 2003). Qualitative research is typically exploratory, supports theory generation and provides a systematic approach to provide insights into "how" research questions.

The main methodological choice in this thesis has been discourse analysis, there were some differences in the approaches between the three essays, but all 'styles' fit under the umbrella of qualitative discourse analysis (Jørgensen and Phillips 2002). The data used in the three essays has mostly been collected from various real life events, where renewable energy has been publicly discussed (see Table 2.). The exception is the first essay where the data included transcripts of two filmed local events, a web discussion forum, online newspapers and a blog. For this kind of inquiry into collective discursive fields, the most obvious source might have been mainstream media, such as newspapers and social media (Humphreys 2014, Humphreys and Thompson 2014). Instead, the participation of the researcher in various energy transition related projects made it possible to gather data as recordings (and also field notes). Thus, the main data sources for the second and third essay are recordings from workshops, seminars and public discussions. The reason for choosing recordings from live events has been the idea of using raw data where people express themselves freely through situational speech. This has two advantage points, firstly the data is produced without the interference of the researcher and secondly, without somebody producing and filtering the texts as for a newspaper or digital media article. Next, the data collection and analysis for each

essay is described in detail. Table 2 (p. 48) gives the reader an overview of the analysis process.

Table 2. Analysis process for the individual essays

Essays	I: Wrath in consumer oppositional activism	II: Exploring New Business Opportunities in Energy Sector - Network Configurations for Sustainable Energy Marketing Systems	III: Market Shaping Myths in Energy Transition
Analysis	Rhetoric Qualitative DA	Ideological discourses Qualitative DA	Ideation as Translation, Qualitative DA
Macro	Talk about politics, law, economic decisions?	Talk about politics, economy, law	Discourses about RE's? *Strategic discourses / Power discourses Responsibilities*
Meso	Talk about technology, information, services	Discourses about the future of RE's? Responsibilities	How do macro-level actors talk about R&I?
Micro	Discourses of RE, RET Responsibilities	Talk about consumers?	Talk about consumers, "what do they do, want and need?"
Data	Transcriptions from: 2x Filmed oppositional meetings (Youtube) 1x Suomi24 web discussion forum 20 x Newspaper and web articles/opinion 1x Blog by local opposing activist	Recordings & transcriptions from 9 energy self-sufficient regions workshops in 2017 -2018. Regions: 2 x Ostrobothnia, 1 x Central Ostrobothnia and 2 x Lapland. Active participants in all workshops together: 12Female and 53 Male	Recordings & transcriptions from 4 events: Energy village project seminar 2014 and Vaasa Energy Week (Energy & Environment seminars) 2016, 2017 & 2018 Active speakers in all events together: 13 Female and 34 Male
Sample size	144 pages (Word Times New Roman 12)	Observations and Notes 278 pages(Word Verdana 8)	63 pages (Word Verdana 8) and 1 h 36 min recording

3.2.1 Essay I

In the first essay, we applied rhetoric analysis. The aim of this essay was to study how consumers use wrath (emotions) in opposition activism towards wind power. Rhetoric analysis is a form of discourse analysis which, like discourse analysis in general, makes it possible to capture the multiplicity of possible meanings and the complexities of social practices (Alvesson and Kärreman 2000: 147). Thus, discourse analysis provides the analytical perspective to grasp how people manage and communicate their meanings to others (Eskola and Suoranta 2008). Rhetoric analysis focuses on expressions through which one aims at persuading others to accept a particular idea or way of doing things (Hartelius and Browning 2008). Emotions are always present and/or played upon in rhetorical strategies (Moisander et al. 2016). Thus, the use of rhetorical analysis seemed relevant to explore how activists frame their arguments as a means to resist the development of a wind park and mobilize collective support. The empirical material in the first essay consists of spoken and written comments, where opponents have expressed themselves freely without any intervention rom the researchers. Data was gathered during two events, all the data was expressed in Finnish. Local actors organized the events, which consisted of invited experts talking about the pros and cons of wind power and answering questions from the audience, mostly residents of the region. These events were filmed and are available on YouTube. They were transcribed for further analysis. The chapter also draws from online news items from regional and national newspapers, a blog, and a web discussion started by a local activist. The blog and web discussion materials were also copied to word format and the newspaper articles saved for further analysis. Regarding ethical considerations, all the data was freely available in the different media channels used, names were removed and pseudonyms used where necessary. We have also refrained from using the name of the location in the essay.

Rhetoric is particularly well suited to the investigation of wrath in consumer opposition, as it is a form of language used to influence— to have effect on—an actual or implied audience (Sillince et al, 2012). The analysis focused upon how opponents talk about wind power, and especially how they use language to influence their intended audience. Thus, we were looking for the way actors were trying to persuade other actors through emotional work (Moisander et al, 2016). The first round of the analysis process was reading through the material and starting to capture emergent persuasion styles and expressions of wrath in different forms. We were on the lookout for angry wordings, rough language and shout outs, expressions of sadness or pity and so on. Three categories of rhetorical strategies started to emerge; the morality, evidence and victimization rhetoric's. (These will be explored further in chapter 4). Altogether, the empirical analysis

followed a pretty standard qualitative discourse analysis process (Jørgensen and Phillips 2002), where the data was iterated, re-visited and analyzed in regards to the theoretical frame. The analysis also required the researcher to translate the findings from Finnish to English.

3.2.2 Essay II

The aim of the second essay was to explore ideologies in municipal energy transition dynamics. Focus was upon how municipal stakeholders structure their social schema regarding local (renewable) energy, e.g. categories that cognitively represent the major social dimensions of groups, such as their distinguishing properties, membership criteria, typical actions, goals, norms, values, reference groups, and basic resources of interest (Van Dijk 2006: 730). The researchers attended and recorded the meetings, so the data also includes notes taken during the events. Thus, there is an ethnographic approach to this study (Ellis 2007), which has further enriched the interpretation of the findings though observation and field notes. For the discourses to remain natural and without interference, the researchers mostly remained in the role of observer. In some cases, the researcher participated as facilitator in a workshop but did refrain from leading the discussions into some specific direction.

The data gathering took place in the five municipalities during workshops and meetings between 2017 and 2018. After having attended, recorded and observed many meetings and gathered a good representation of our cases, we sent the selected recordings for transcription made by a professional service provider. Because this study has its focus upon meso-level actors, we selected the final recordings following the notion of purposeful sampling (Lincoln and Guba 1985) meaning they are from meetings and workshops that were attended by local entrepreneurs, farmers and forest owners, municipal decision makers and politicians as well as local or regional project managers and developers. As the Energy Self-sufficient Regions (ESSR) project had its focus upon boosting new renewable energy businesses in the municipalities, the participants in the meetings and workshops mostly fit the profile. We also made sure that the data represented all five municipalities. The participants were always invited to the meetings or workshops by the ESSR project, either with help from the local contact person (usually someone working for the municipality) or directly via the local newspapers and Facebook pages. Regarding ethical considerations, the researchers always introduced themselves to the participants at the beginning of the workshops, and the researchers asked for permission to record the events. To

assure the anonymity of all participants the names of locations have been removed and we have used fictive names in quotes.

To excavate deep ideological structures, we looked for the zones of conflict (Mees-Buss and Welch 2019), where a discourse is questioning or persuading another, either real conflicting idea (the discussion happened in the meeting) or a perceived contractionary ideology (the talk includes the idea of others who might not be present in the meeting) (Moisander 2001, Press et al, 2014). We used NVIVO software to analyze the transcripts and categorize emerging structures. Following the value-laden, lexical expressions that group members share in their talk and the presuppositions they make in explaining cause-and-effect relationships (Van Dijk 1998) implies that, firstly, all the transcriptions were thoroughly read and sentences about 'what, how, who and why' regarding local energy were coded into categories. These categories (Called 'Nodes' in NVIVO) where then arranged according to larger themes (surfacing from the data) such as "economic opportunities comes from local biogas" or "environmental issues are restricting our livelihood". Some wordings could figure under multiple nodes, for example "Local business opportunities comes from biogas" would be coded both as biogas, social and economic. After this initial phase, the emerging structures were merged and scrutinized to find convergence and especially look for different logics or constructs, e.g. what kinds of ingredients were accepted into the structure of an ideal storyline about renewable energy (Van Dijk 2006).

3.2.3 Essay III

The aim of the third essay was to explore how institutional actors use the Finnish national meaning systems to transform the Finnish energy system. The notion of agency or actors relates to the role of translators – researchers, professionals, leaders and consultants – who re-write or retell generic rational myths, turning them into specific ones. (Zilber 2006: 200). The focus was upon what solutions Finnish institutional actors offer to make the transition to zero emission society by 2030? The aim was to find constructs of rational myths in the suggested energy transition solutions, e.g. who, how, why and when can make the transitions happen and on what premises. Discourse analysis is a suitable method "*when phenomena are scrutinized in relation to the development of wider discourses in society, such as sustainability discourses, with both institutionalizing and deinstitutionalizing implications on practices*" (Maguire and Hardy 2009 in Yngfalk 2019: 1570). To capture the actual acts of translation the data consists of in situ observations and recording of translators telling their audience about how to enable the Finnish energy transition towards zero emissions. The data consists of transcriptions from

recordings of national energy seminars 2014-2018 as well as observations and field notes. This has been the time when the Finnish energy transition has been gaining momentum, and the public discourses have been colorful and multifaceted. The recordings were transcribed by a professional service provider, some were in English and others in Finnish as original language. The researcher translated the quotes to English.

Here the analytical emphasis has been on how key actors re-translate existing myths into the energy sector and the sustainability marketing discourses. We were on the look for constructs of generic rational myths in the institutional sphere of energy transition. This means that it was important to understand the basic idea behind deconstructing and analyzing the actual process of translation (Zilber 2006: 297). There the focus is on the ideational – exploring institutionalization dramas through their ideational facets may help us to understand the translation process better (Ibid 2006: 300). In other words, when exploring the empirical data the researcher needed to be sensitive to the story behind the discourse or narrative, to excavate the worldview and cultural underpinnings of the transition story that was told by the actor. The analysis followed the process of standard discourse analysis (Jorgensen and Phillips 2002) and entailed reading the data multiple times as well as organizing it into themes and later into categories. Here the naturalist dilemma inherent in social constructionism of the observer being part of the context became obvious. This might also be considered a positive thing, and the reason why the national connection to the rational myths became represented through familiar Finnish songs.

3.3 Assessing the quality of the research

What constitutes good qualitative research and how to assess it on its merits? There cannot be dominant templates in qualitative research because "*they differ on the nature of 'meaning' and how it should be captured*" (Welch and Piekkari 2017: 714). Self-reflection and the surfacing of assumptions, beliefs and value judgements requires an openness regarding the researcher's paradigmatic standpoint (Ibid. 2017), e.g. it is the paradigm approach to validity that counts.

The question regarding trustworthiness (Lincoln & Guba 1985, Miles & Huberman 1994) has to be taken into account. In this thesis it has been approached by using data from three levels of analysis. This means that findings from the three system levels; micro, meso and macro have been contrasted and this has also allowed a richness of data. Specifically regarding triangulation, the findings from the three essays have been reflected upon- and have received feedback from co-authors. The

researcher has also been following the public energy discussions in Finland (and globally) during the entire time period of this thesis (2014-2020) which has also enabled a more holistic perspective to the research.

When using discourse analysis as methodological choice, the question of validity comes up. "*Validity is the question of what standards the research must meet in order to count as qualified academic research*" (Jørgensen and Phillips 2002: 171). In discourse analysis, as in social constructionism in general, the way to show that you meet a certain set of criteria is important. Qualitative research cannot rely on the positivist epistemology assuming that knowledge can reflect reality without bias (Welch and Piekkari 2017).

Jørgensen and Phillips (2002: 171) suggest two criteria adopted from Potter and Wetherell (1987), these are coherence and fruitfulness. There has been critique towards coherence as a way of validating research, which has added the notion that '*the research should be plausible to the community of scholars'* (Howarth 2000: 130). This refers to the collective aspect of knowledge production. Thus it is argued that representations that reproduce a given discursive practice also tend to reproduce the social order in which it is embedded, and the power relationships prevailing there (Jørgensen and Phillips 2002: 71), this alsorefers to Faircloughs (2007) view about social reproduction and change. Fruitfulness emphasize the importance of the production of new knowledge and how the research may foster new types of thinking and action. These two criteria are broad and debated, but they refer to the question about "when is an analysis completed"? How does the researcher know when to break the interpretative circle? How much of the analysis should be included in the research report? "*It is the explication of how the data are rendered meaningful that enables the reader to assess the validity of the results of discourse analysis*" (Jaipal-Jamani 2014: 802). See Table 3 how this thesis answers the validity questions.

Table 3. Validity checklist (Jørgensen and Phillips 2002)

The analysis should be solid. It is best if interpretation is based on a range of different textual features rather than just one feature.	The three discourse analyses have all included a large amount of text from multiple sources. The texts have been thoroughly read (multiple times) and iterated.
The analysis should be comprehensive. The question posed to the text should be answered fully and any textual features that conflict with the analysis should be counted for.	The question(s) asked from the texts have been clarified in the beginning of the analyzing process. As it is an interpretative process, the text might also show something new that went unnoticed at first.
The analysis should be presented in a transparent way, allowing the reader, as far as possible, to 'test' the claims made. This can be achieved by documenting the interpretations made and by giving the reader access to the empirical material or at least by reproducing longer extracts in the presentation of the analysis.	The findings have been presented in the findings as 'quotes' (longer extracts) to inform the reader about the type of discourses behind the different themes that emerged. Also, findings have been presented as tables where they are contrasted to the theoretical framework.

This thesis answers to the validity questions by showing a rich interpretation of multiple, qualitative data sets and stating clear research questions that direct the process. It has also presented the data as openly as possible (see Table 3 and essays).

4 SUMMARY OF THE ESSAYS

The aim of this dissertation is to create more understanding about the sustainability transition dynamics of energy marketing systems, and the way transformations are shaped and/or the current regime maintained. To answer this quest for understanding the works of the 'invisible hand' in the marketplace, three essays have been undertaken. This chapter presents the primary findings of each essay and finally bring them together under the energy agora framework. It is also worth noting that as the aim of the dissertation was to gather discourses, the myths, from the three levels of the Finnish energy system the most natural way was to create an essay for each level. This means that essay I and II include theoretical discussions which are not directly linked to the summary of the PhD. Essay III connects more directly as that is where the ideations as translation has been elaborated upon.

4.1 Wrath in consumer oppositional activism

Background and objectives essay I

Energy transitions have been approached from different research perspectives and levels which can crudely be divided into the grassroots, micro level of citizens, consumer, prosumers, local and communities, the technological perspective and business development perspective where niche innovations have gained attention and the governance perspective, the macro-level. Different kinds of transition barriers' exist for the different levels. This essay represents the micro-level discourses, it explores wrath in the area of consumers' collective opposition of wind power by employing rhetoric analysis revealing the explicit verbal forms of wrath. Through a rhetorical lens, the chapter analyzes a case in which resistance succeeded in putting an end to the development of a wind power park in a rural area in Finland. The findings show how wrath underlies the ways in which activists try to influence their adversaries as well as to mobilize support among consumer allies. In particular, wrath is expressed through three rhetorical strategies: morality, evidence, and victimization rhetorics. Wrath is visible in "ethos appeals," but is also used as a resource in framing arguments of more rational as well as emotional characters.

Main findings Essay I

The findings suggest that activists employed three rhetorical strategies in particular to undermine the project as well as to enroll supporters. In *morality*

rhetorics, arguments that appeal to ethos are used, such as questioning the righteousness of the project and the authority of the initiators. *Evidence rhetorics* are underpinned by arguments aiming at undermining the logic of the project by typically referring to a kind of rationality, using facts and figures related to the consequences arising from the wind power park project. In *victimization rhetorics*, activists frame their arguments by appealing to emotions and referring to various kinds of "suffering" and ill-being that the specific targeted wind power park would cause. It should be noted that an argument can rely on all three appeals at once and it is not always clear what is the most decisive aspect of an argument or whether it is more ethical (ethos), rational (logos), or emotional (pathos) in nature. Although wrath can be found in all three strategies, we found that in victimization (pathos) rhetoric, consumers' arguments seem also to be driven by feelings of grief and fear. Moreover, in our study arguments using this strategy aimed at evoking emotions. Walgrave and Verhulst (2006: 275) emphasized the importance of emotions and victimization in a new type of social movement, in which consumers may evoke fear related to the personal suffering of others and the need to hinder a harmful future event, or where the victims initiating the social movement themselves. Interestingly, Cass and Walker (2009) looked at how experts (developers and power holders) perceived the individual emotions of local stakeholders in UK wind power projects. Particularly highlighted were (negative) emotions expressed in resistance to proposed development projects, such as hatred, passion, and fever (Ibid. 2009: 62), and their effect on the so-called rational thinking of individuals. They underline the fine line between what are considered emotional and rational arguments, as perceived by experts, who thus automatically represent the rational side with legitimate measurements and information (Ibid. 2009). The local opposition, lacking legitimate institutional backup, is easily labeled as a wrathful opposition whose rational thinking is blurred by overly strong emotions.

Earlier research has identified consumer opposition in relation to the "not in my backyard" (NIMBY) paradox, which refers to a "good" sustainability project, such as renewable energy power plants, mobilizing highly negative reactions and protest among otherwise sustainability-friendly "green" consumers. Our findings show in particular that the familiar concepts involved in the development of RET (renewable energy technology) projects—NIMBYism and LULUs (locally unwanted land uses), the first of which is widely used to explain local resistance (for example Cass and Walker 2009, Reusswig et al, 2016)—are too simplistic for an understanding of local opposition. The present findings highlight that what we identified as righteous wrath is reflected in questioning the general, not local, viability of the suggested technological solution in economic, health, and environmental terms, and may generate information for wider use in the society.

In terms of managerial implications, we conclude that energy transformation processes can be highly emotional endeavors. To support successful implementation, it is important that the developers understand that they should be prepared to answer to ethos, pathos, and logos rhetorics, and understand that consumer fear often relates to outcome uncertainty and is a natural reaction. An interesting question for future research regards the individual differences in rhetorical aptitude: Why do some people accept and agree with certain frames (rhetorics) and why do these generate/ trigger action? Our chapter approaches emotions as stemming from, as well as being reactions in favor of and against, institutionally (or socioculturally) inscribed roles. Thus, although we focus on the role of individual/collective emotions regarding transformation from one technological system to another, and its concrete outcomes in the form of resistance or acceptance, we also acknowledge the wider marketing system affecting considerations of right and wrong (moral and affective emotions). See Table 4 for the main findings of the Essay I.

Table 4. Findings Essay I

Rheotric	**Morality**	**Evidence**	**Victimization**
Rhetorical, oppositional 'strategy'	Questioning by 'ethos' appeal: **ethical**, rights and wrongs, authority.	Questioning by 'logos' appeal: **rational**, facts and figures needed.	Questioning by 'pathos' appeal: **emotions**, sadness and suffering.
Motives, reasons to participate in opposition	Questions of justice and power Who has the right to decide over my home? Who is gaining from this?	Seek to understand the consequences Call for facts or reliable research Expressed concern, suspicion, or distrust Using 'emotionless' rhetorics, Enlightened citizens aiming at finding the truth.	Arguments driven by feelings of grief and fear. Evoking emotions (fear, suffering) Need to hinder a harmful future event The victims initiating the social movement
The aim was to…	To undermine the authoritarian notion of the project and the people behind the project.	To question the economic, health, and environmental viability of the project, as well as the correctness of the technology used.	To shield their communities by calling for reliable evidence and questioning the reliability of presented facts (particularly when

			lacking or distorted).
Way of using language to persuade 'others'	Strong expressions of wrath such as swearing, insulting opponents, or using bolded text to highlight one's opinion, irony or sarcasm	"Logical evidence" and rational argumentation Knowledge and technology-oriented Expertise, 'no emotions'	Discourse of pain, loss, and/or fear Focus upon sharing and evoking emotional

Main Contributions Essay I

The first essay reflects micro-level, individual people's concerns regarding the dynamics of energy transition. By focusing upon opposition, it teases out discourses related to power hierarchies, roles and positions in a socio-cultural context, this case Finland. Answering to RQ1: How do people construct their energy realities in the context of the Finnish energy marketing system? The essay shows that there are different social strategies that individuals turn to when coping with change. Approaching socio-culturally inscribed 'emotional strategies' for questioning a new technology and its social, environmental and economic impacts shows us how micro-level actors, individuals embedded in a social action field (see Layton and Duffy 2018) confront power structure (governance), the provision structures (business) and the social structures (other individuals). These are the morality, evidence and victimization strategies. How these discourses express 'energy realities' in the Finnish agora is elaborated in the section 5.1 and the way they relate to the mythical work is shown in section 5.2.

4.2 Exploring New Business Opportunities in Energy Sector - Network Configurations for Sustainable Energy Marketing Systems

Background and objectives Essay II

This second essay represent the meso-level discourses. More specifically, we define the meso-level actors as local- 'regime' level decision makers, politicians, business people, researchers, innovators, consultants, NGO's, project leaders as well as prosumers (and so -called niche-level actors). These are individuals and groups who have the means to act, either because of their existing role in a socio-technical system or the possibility and interest in entering such role (prosumers as an example). These actors might either maintain or challenge the current regime and through ideological tensions affect the legitimacy (Press et al, 2014) of energy

innovations. In this essay, we propose that multi-partner networks, conceptualized from the perspective of energy systems, uncover underlying ideologies that imperil change yet in these revelations offer opportunities for sustainability oriented innovation. This paper examines discourses in five Finnish municipalities' energy transition processes to map the focal networks and make sense of ongoing interactions. The study fills a gap in research in networks of exchange by extending the idea of sense making to capture the ideologies that hide in discourses during socio-technical transitions. We identified three types of ideological discourses; The Clan, Tech-believer and Downshifting. Five subject positions were constructed by the discourses; Working-Ant, Follower, Changemaker, Rationalizer and Treehugger. The implications of the ideologies embedded in municipal, multi-partner networks that participate in the energy transition are important as they affect who will be heard in a local context and thus future choices directly related to sustainability outcomes.

Main findings Essay II

We identified three discourses, namely the The Clan, Tech-believer and Downshifting. As explained in the analysis sector, the discourses were excavated from the texts by merging themes and structures into coherent storylines about the renewable energy reality constructed by different talk (Mees-Buss and Welch 2019). We found that ideological discourses also create different types of subject positions for the renewable energy transition. These are not real individuals but reflecting distinct positions given to groups of actors in a regime (Markkula and Moisander 2012). A subject position is understood in terms of 'the person' or the individual as a placeholder, a linguistic category and a structure in formation, which enables positioning an individual within a system of representation. A person can position either oneself or another in a discourse, mostly unaware of this when doing so (Moisander 2001). The five identified portraits were named Worker Ant, The Realist, Changemaker, Rationalizer and Treehugger. These fictive positions give hints of power structures that might exist in the context of the municipal transition arenas. From the perspective of ideology, the question became "What are the main beliefs of these positions"? Attention was also given to the "who's" that did not position themselves but were talked about (e.g. positioned as the other in discourses produced by municipal actors). This became the Downshifting discourse and the Treehugger subject-position. Next, the ideological discourses and the subject positions are described in detail in table 5.

Table 5. Findings Essay II

Ideological Discourses	**The clan**	**Tech-believer**	**Downshifter**
Ideological constructs & beliefs	Utilitarian, altruistic, traditional, collective to individual	Techno-utopian, individualistic	Nature centered, individual to collective, altruistic
Logic – sense-making – what creates the rationale for doing something regarding energy	Localism, bio-based solutions bring local welfare. We need to maintain our traditional system of production but in reasonable scale. We need to slow down the global growth and focus on small scale, national and local production and consumption.	New technological solutions and innovations brings local welfare and saves the planet as well. Growth and development has to continue "but we can do it better, smarter and more sustainably"	Nature is sacred we need to change our perspective towards the "native view". We are part of the ecosystem and need to adapt. Solutions to tackle climate change and biodiversity loss should drive the transition
Main themes	Rely on experts to measure the correct things, trust the existing knowledge	Facts & figures – everything can and should be measured, we can manage and control nature, knowledge is everywhere	You cannot measure everything – quality of life is not measurable by GDP. You cannot rely on all experts, new knowledge is needed
Manner of talk **These can be considered both as positive and negative by other** (refers to how the subject position is talked about)	-"Realistic" -Informal language – talk like locals "dialect" -Reliable and trustworthy -Getting along with others, "do not upset the clan" -don't upset the status quo – "act normal" (e.g. behave according to local unspoken rules)	-"Expert - rational" -Formal language – expert language -Expert and 'high fly' -'Good contact' – outside clan – expanding and developing new -"We spirit" – believe in future opportunities	-"Radical" -Emotional language - expressing worry about environment -Utopian, un-realistic -"Does not understand reality" - Luddite -Different ideas - Fighting for change - "Wake up people"
Subject Position (SP)	Worker Ant and The Realist	Changemaker and Rationalizer	Treehugger

The contradictions Challenges to energy transition	Too radical or "foreign" ideas threat to local ways of doing Outside rules and regulations problematic but have to be followed City Greens and vegans, luddites, create unnecessary problems!	Slow pace, rigid structures, incremental, conformism are in the way of new innovations Wrong technology, stupid choices (not enough knowledge), lack of facts Too much rules and regulations!	People do not listen, nature is not given a voice Radical system-wide changes are needed – downshifting etc. "Redneck" mentality and not being taken seriously!
Relation to Sustainability dimensions **Finding: How to trigger these types of actors**	Economy- Social-Ecology "Social safety comes through economic balance…"	Social-Economy-Ecology "Innovation and development comes through brave action…" or "We are allowed to take these ideas further despite economic risks…"	Ecology-Social-Economy "Biodiversity and emission free development is made possible by inclusiveness and social actions that are not constrained by economic interest…"
Position in network	The ones maintaining a system - the "doers" Difficult-to-change mind-set and conflict-avoidance Needs time to digest and prove of functionality. Securing local balance "Incremental innovations"	The leader or catalysator Lots of knowledge and information that might "get lost" – How to capture into transition processes? Conflict might be needed Mostly still entrenched in the dominant paradigm, hard to break free and make decisions that are radical even if this group has the capacity "New Innovations"	Natures voice – challenger of dominant system The hidden discourse. There could be more 'fence sitters' who cannot take this position openly Constant conflict Might be capable of thinking outside the box, The energy cultural "misfits" open for radical innovation. Often lacking the know how and support from others "Radical Innovations", the "Challenger"

Main Contributions Essay II

The second essay answers to the RQ1 "How do people construct their energy realities in the context of the Finnish energy marketing system?" through the exploration of ideological discourses by meso level actors. Our paper takes a social-constructionist perspective on sustainability transitions in local-level, municipal context. By exploring ideologies, it reveals underlying socio-cultural structures that are place bound, culturally inscribed and do their work at the level of mindset and belief-systems, thus affecting energy innovation and socio-technical transition pathway dynamics.

Understanding underlying intangible drivers in local settings has important implications for policy as it points out how there are built in biases or defaults that make certain mindsets and perspectives accepted, at the same time as they ignore other perspectives. "Taken for granted truths vs. non-legitimized perspectives". A window of transition opportunity opens in the moment when a "change agent" enters the municipal arena, as in our case due to the energy village project. Thus, as transition management research shows, the key project actors enter the local space with their own ideological set-up and the unfolding of the local development. In other words, transitions at local level are strongly affected by a small group of individuals in key roles. Wanting radical innovations that make regions take leaps towards more sustainable systems creates pressure on the transition managers and how far they are prepared to go in putting pressure and challenging the incumbents. Entering a traditional context where institutional belief systems have been fixed for long, such as the rural areas (with a highly utilitarian ideology) does initially pave way for certain, mostly incremental innovations whilst the more radical ones gain no interest as they are not founded in the local world view and its logic. We need to highlight that such initially not wanted social or technological innovations create resistance and puts the change agent into a demanding position.

With the expectation that local transition is a democratic process, local people are asked to join and vote for solutions, still as our results show, the underlying social hierarchies affect who will be active in such collective occasions e.g. workshops and meetings. It might be that the accelerators are left alone in their efforts of transition work if they fail to convince the tech-bio and/or include the eco minded. Questions for transition managers are: How to be clear about how big changes we really need to achieve and how to support the change agents who have the hands on task to engage the local actors?

The second essay also partly answers the RQ 2: What kinds of energy myths circulate the Finnish energy agora? Our findings indicate that ideological

structures have the power to shape socio-material outcomes. By understanding the mental-map of an energy arena (in this essay municipality), a transition manager has the opportunity to choose tools and avoid biases that might hamper sustainability outcomes.

4.3 Market Shaping Energy Myths

The findings from this essay will be reflected upon the micro and meso level findings. This essay has served as a means to create more understanding of the concept of path dependence and lock-ins as mental models maintaining institutional rigidness in transitions. We have also used the institutionalization as translation framework to show how energy market actors might shape the transition trajectories by drawing from national and rational mythical constructs. Thus, the third essay has been central in developing the understanding about the social mechanisms enabling mythical - mythological work in the (energy) marketing system as well as the discussion how mental lock-ins evolve and maintain institutional rigidness, and the dominant social paradigm. How the findings of this essay relate to the third research question is clarified in chapter 5.

Background and objectives Essay III

The third essay had the focus upon macro-level, institutional actors; people in 'power roles' associated with states, governments, public agencies, politicians, policy-makers, bureaucrats, local governments and sub-governmental organizations. High-level industry and economic leaders are also included into this group, as they are seen to be actively participating in shaping the Finnish energy market (as decision makers, advisors and opinion leaders). The aim of this essay was to understand how key actors in the Finnish energy market construct and translate their energy reality to others. It views institutionalization as a process where actors are carriers of institutions (Zilber 2002), taking a micro-macro view on path dependency and lock-ins 'as mental models that result in (and maintain) institutional rigidity (instead of driving institutional change)' (see Haase et al, 2009). It examines how individual action is oriented towards the behavior of others, legitimizing certain mental models over competing ones (Lawrence et al, 2013). This is done by exploring the process of institutionalization as translation (Zilber 2006) through analyzing rational energy myths circulating the Finnish energy marketing system. Energy market actors can be seen as drawing from a collective cultural "toolkit"– rhetorical and symbolic resources that social actors use and interpret dynamically (Swidler 1986, Zilber 2006). So called rational

myths bridge the individual discourses to collective discourses e.g. national myths which tell us about different energy realities and how they are structured.

Each culture contains different meaning systems (Friedland and Alford 1991) from which its members can borrow, mold, and recreate specific rational myths (Zilber 2006: 298). As "*politics can be understood in broader terms through power defined beyond the dichotomy of agency and structure and more as knowledge and discourses*" (Focault 1989 in Tarasova 2018: 129). In the case of energy transitions, it means that the politics of energy transitions are shaped by discourses of energy transitions (Tarasova 2018: 129).

Main findings Essay III

The analysis uncovers that marketplace myths circulating the Finnish energy market are mainly constructed around three dominant energy myths. The "centralization myth - The Energy Dragon Myth" where governance-level experts are given a central role in normalizing, maintaining and also 'safely' transforming the energy system. The electric frequency is compared the human heartbeat, the pulse of the nation, and "We", in this myth the government and big industry experts, maintain it steady. The big actors control the field of production and distribution to maintain the energy system in balance.

This dominant discourse is challenged by a decentralization myth – Domesticated Energy Myth, where a shared responsibility between actors from different levels of a socio-technical system , e.g. consumers, prosumers, businesses and governance is seen as the way forward in furthering the energy transition. The Domesticated energy myth also includes perspectives that are opposing the idea that there is a need for sustainability (the rural resilience – rational myth). This is a mixture of two opposing ideologies, the neoliberal glocal market with green ideas and the rural traditional independent free from the grid mentality. What unites the two discourses is the unwillingness to obey the rigid rules of government and its clerks – the current 'market model' which is perceived as limiting.

The third dominant myth – The Global Energy Myth could be considered a convergence of the two earlier collective mindsets, it approaches national challenges and their solutions as global goals. These three dominant energy myths include more specific discourses imbued with ideology – these were called the rational myths as it is seen that on this level the individual makes a rational choice regarding their discursive strategy. We must keep in mind that this is talk produced by macro level powerful actors who communicate to an audience of other experts but also common people, this has for sure restricted the level of rawness of

speech found on the micro and meso level. Still, the ideological belief constructs are hidden into the storyline of the macro level teller. Interestingly, the domesticated energy myth which in itself is a quest for freedom – deregulation and flexibility in a de-centralized market – had to ideologically opposing radical myths constructing it. Namely the Smart & flexible and Rural resilience. This finding has similarities with the research by Press et al, (2014) who found that the opposing sides of farmers (bio and traditional) still constructed their logics upon the same paradigm assumptions.

The first dominant energy myth, the Energy Dragon is maintained by two similar discourses, the Rock solid and Big brother. The difference here is that the first one talks about the power holders as the protectors ('this is the king, you must obey, and he will maintain the dragon away) whilst the second, Big brother, recognizes a power bigger than 'him' but puts 'himself' as the best one to protect the people. Finally, the third dominant myth, Global energy, suggests the world as a village perspective where the ideological constructs draw from the globalist discourse. Table 6 shows a more detailed organization of the different mythical strands.

Table 6. Findings Essay III

Dominant energy myths	**Energy Dragon**		**Domesticated Energy**		**Global Energy**
Rational myths	*Rock solid*	*Big brother*	*Smart & flexible*	*Rural resilience*	*Global Village*
Discourse elements 'ideological constructs'	Survivalist We, the industry experts and ministry have the skills to run the grid and the nuclear plants safely and maintain the system balance.	Protectionist Politician's task is to provide direction in this country. Technology will sometimes give directions bypassing the wants of politicians.	Neoliberal – greenspeak Free the market, We the market actors, consumers, big industry and politicians work together to find solutions. Finland a global forerunner in green, clean innovations	Nationalist We have the biomass, We own our land We have the right to use it as we desire. Finland is too small to have any impact on global events,	Globalist – greenspeak Global effort Facts important Technology follows global trends ET a collective endeavor and Finland has an important role to play
How the macro actors see consumers role(s) in ET	Passive-Receiver Enabling the consumer to live a normal life and remain "inert" to energy issues	Passive Don't worry trust us, we are the experts, just do as we tell you (and vote)	Active There will be more and more prosumers and active customers	Active - Passive Individual have the right to decide over their energy resources	Active Citizen as a central actor in the national and global ET

How the macro actors see Business & NGO's roles in ET	Big industry and government set the "rules of the energy game". Need to adapt to system requirements – preferably big actors	Government and policy will decide what "is possible" for SME's It is up to ministry to make the right choices "the market won't do it alone"	"Small is beautiful and scalable"! Flexibility of policy makers and big actors needed to enable innovations	Existing SMEs are valuable for the countryside and nation. Policy needs to provide safety for existing traditional business	Policy needs to enable markets where new innovations can enter quickly and people can participate in the energy market
About system structure	Centralised	Centralised	De-centralised	De-centralised / Centralised	De-centralised
Sustain-ability dimension that becomes highlighted (How to solve CC)	Social: "Resilience and safety first" "The energy palette" (Nuclear, hydro, wood, peat and wind)	Social-economy "The rational political choices" We provide the world with the best know how (our engineers)	Economy-ecology "We need to change to cleaner technology" Green innovations Fast transformatio n of energy system Free market	Social-economic "Traditional ways are enough" "The energy palette" (Nuclear, hydro, wood, peat and wind)	Social-Ecology "Only one planet" Internat. cooperat. Greentech, innovation Active citizens, Green policy
Responsi-bility	The decision makers take responsibility and maintain the system	"Don't blame us – blame the system" Market and EU dictates the system structures.	"We" run the system – all actors responsible for their actions. Do we want to follow or lead?	We do our best and our own thing (inside the system) as has always been done.	We need to challenge current system and take global respons-ibility
National Myth	"*Uraani halkeaa – läpi harmaan kiven*" E.g. When the uranium cracks – through the grey stone"	"*Kun suomesta tuli kilpailuvalti o" ja "kun suomi putos puusta*" E.g. When Finland became a competition state – and fell off the tree	"*Olen juppihippi-punkkari ja lennän taas*" E.g. I am a yuppie, hippie, punk and very high fly	"*Suo, Kuokka ja Jussi*" E.g. The swamp, the axe and the man (Jussi)	… "We are the world – we are the children"
Relating to other countries:	Leader in safety and diplomacy. We don't like to negotiate our energy mix with others.	Leader in 'know how' and policy skills. We provide the world with the best engineers!	Leader in excellence, technology and in reaching the climate goals! Networking and exporting,	"Who cares" about the others as long as Finland is ok. Keep away!!!	We collaborate and participate. We bring our Finnish diplomacy and

			that's how this is solved!		expertise to the globe.

Main contributions Essay III

The aim of this essay was to understand how key actors in the Finnish energy market construct and translate their energy reality to others. The paper takes a view on institutionalization as a process where actors are carriers of institutions (Zilber 2002), taking a micro-macro view on path dependency and lock-ins 'as mental models that result in (and maintain) institutional rigidity (instead of driving institutional change) (see Haase et al, 2009). This essay explores how Energy market actors can be seen as drawing from a collective cultural "toolkit"– rhetorical and symbolic resources that social actors use and interpret dynamically (Swidler 1986, Zilber 2006). So called rational myths bridge the individual discourses to collective discourses e.g. Dominant Energy Myths (national myths) which also tell us about different energy realities and how they are structured. This is elaborated further in section 5.1 (answering research question 1).

The main work regarding the second research question 'what kinds of energy myths circulate the Finnish energy marketing system' was undertaken in the third essay. These were found to be the dominant energy myths Energy dragon, Domesticated energy and Global energy. These dominant general myths (national myths) maintain several ideologically imbued rational energy myths, namely the Rock solid, Big brother, Smart & Flexible, Rural resilience and Global village.

4.4 Summing up the three essays

The three essays have all answered the first research question: How do people construct their energy realities in the context of the Finnish energy marketing system? To do this, discourses produced by people at the consumer (micro), business (meso) and governance (macro) levels were explored. The energy realities in the Finnish energy system seem to be based upon three distinct meta-ideological worldviews regarding energy transition (see section 5.1). All three essays have also partially participated in answering the second research question: What kinds of energy myths circulate the Finnish energy agora? The main work regarding building the framework for exploring this question, was undertaken in the third essay, which then helped to reveal the dominant myths across the three (micro, meso and macro) levels in the agora framework. The results are presented in section 5.2. Finally, by bringing together the findings in the energy agora framework we answer the third research question: How to uncover intangible path

dependence and lock-ins in the energy agora framework. Further, we discuss the connection between rational energy myths, national myths and global mythologies and how these findings reflect upon earlier research about DSP and marketplace mythologies. The findings from the three essays are brought together under the energy agora framework in section 5.3 and explored in the context of sustainability transitions in section 5.4. This is followed by discussing the contributions to the fields of Macromarketing, sustainability marketing, TCR , CCT and sustainability transitions in section 5.5 as well as limitations and future research suggestions in section 5.6. Chapter 6 brings the thesis to its conclusion.

5 ENERGY AGORA DYNAMICS AT WORK

"Plant trees. Get arrested. Stop eating meat. Say no to plastic. Abseil down a government building in a bumblebee costume. Close a road with a broken caravan and two tambourines. There are many ways to fight for climate justice, but each of us possesses a powerful, often forgotten weapon: our money" (Extinctionrebellion 2020).

The aim of this dissertation is to create more understanding about the sustainability transition dynamics of energy marketing systems, and the way transformations are shaped and/or the current regime maintained. This broad question has been investigated from the perspective of social constructionism, using discourse analysis as a method to excavate socio-cultural-cognitive aspects of path dependence and lock-ins'. Following chapter presents the findings of this thesis.

The three essays reveal dominant meta-discourses circulating between the three levels of the energy agora, and how these re-tell five types of rational energy myths circulating the Finnish energy agora namely the Rock solid, Big brother, Smart & flexible, Rural resilience and Global village. The first research question, 'how do people construct their energy realities in the context of the Finnish energy marketing system?' laid the base for mapping the socio-cultural-cognitive belief systems at work in the Finnish energy agora. The realities were named: Traditional, In Transition and Climate Emergency. The results from the individual essays are presented in the earlier chapter (Ch. 4) and corroborated in section 5.1.

The second research question, 'what kinds of energy myths circulate the Finnish energy marketing system?' opened up the fascinating world of myths and mythologies and how they relate (and translate) into the everyday world of people. This was done by following the process of institutionalization as translation (Zilber 2006) by analysing discourses circulating the Finnish energy marketing system. We found that the mythical constructs circulating in the energy agora do translate throughout the micro, meso and macro levels (see section 5.2 for full discussion). They show existence of legitimized collective social rituals and roles and do play a role in knowledge and input. A central question regarding transition dynamics is who is considered an expert or allowed to speak up? Thus connecting with the notion of path dependence maintained by certain metal models as lock-ins. This discussion is found in section 5.2.

To continue the exploration of intangible mental models in the transition dynamics and their relation to path dependence, section 5.3 set out to answer the third research question; How to use the energy agora framework to uncover mental

path dependencies and lock-ins? This is where the energy agora framework is used to explore the interplay of evolving shared understandings, ideologies, and mental models of social collectives at the macro, meso and micro levels. It unites the different approaches from the three essays so that they create a systemic agora field, where the larger reflection against the theoretical underpinnings can take place. We discuss what these findings entail for the adoption of new practices, expectations and behaviors at the micro-level. Thus this also relates to the implications for transition managers (section 5.4) and the sustainability marketing research (section 5.5).

5.1 How do people construct their energy realities in the context of the Finnish energy marketing system?

To explore and understand intangible drivers in transitions we need to turn our focus towards mindsets and beliefs embedded in such processes. These individual worldviews were explored in the three essays by analyzing oppositional rhetoric's, ideological discourses and mythical constructs. Despite the differences in the main focus of the discourse analyses in the three essays, all construct the reality of the speaker, revealing belief structures. Thus, the perspective of the researcher was, that expectations emerging during an energy transition process, requires actors to consider the possibility of 'a new social order' in contrast to their current reality (Moisander 2001, Salignac 2012). This implies the underlying assumption that the reality of everyday life as observed by an individual, is a social construction (Berger and Luckmann 1967).

Socio-cultural systems have evolved throughout time, cementing habits of doing things in certain ways as perceived reality, and created institutions to maintain and structure the collectively agreed upon belief-systems (Giesler 2008, Humphreys and Thompson 2014). When exploring deeper underlying belief-structures (Mees-Buss and Welch 2019) as ideological constructs (Press et al, 2014), it means that many beliefs, habits and thus practices stem from a collective subconscious – unquestioned assumptions about how things are (Kilbourne and Mittlestaedt 2012). As they have become taken for granted ways of thinking about something (mental models) and doing things (practices) they are considered as the legitimized truth by market actors (Markkula and Moisander 2012; Giesler and Veresiu 2014; Humphreys and Thompson 2014).

I found that corroborating the main themes from the three levels of discourses made certain common themes emerge. By using ideologies as the common nominator to track energy realities in the Finnish energy agora, emphasis was put

on finding collective belief-systems. "*There are no private, personal ideologies; they are always socially shared beliefs by members of a group regarding social representations defining their identity. This means a shared understanding of fundamental conditions and "ways of existence and reproduction*" (Van Dijk 2006: 116). Ideologies are connected to culture, which provides history, symbols and meaning to things. Thus, ideology builds upon socio-cultural collective belief-systems and knowledge structures of how things are and why in a given socio-technical system. This way they support institutionalized ways of doing things, which is also important as it helps avoiding chaos in decision making and action (Haase and Raufflet 2017). Following the above reasoning, I asked the data (the findings from the three levels) following questions: "How things are and why"? The answers that surfaced form the three data sets, produced three ideologically differing groups and energy realities. These were named Traditional, In Transition and Climate Emergency and represent the energy realities presented in following table 7.

Table 7. Energy realities micro, meso and macro levels

Essay I: MICRO *Energy realities as oppositional rhetoric*	**Morality**	**Evidence**	**Victimization**
Approach to questioning the building of wind power:	Questioning by ethos appeal: ethical, rights and wrongs, authority	Questioning by logos appeal: rational, facts and figures	Questioning by pathos appeal: emotions, sadness, suffering
Reasons behind arguments:	Questions of justice and power Who has the right to decide over my home? Who is gaining from this?	Seek to understand the consequences Call for facts or reliable research Enlightened citizens aiming at finding the truth by rational, objective approach	Arguments driven by feelings of grief and fear. Evoking emotions (fear, suffering) Need to hinder a harmful future event - victimhood
Discursive strategy and thus approach to expressing reality:	Strong expressions Insulting opponents "Going to war"	Portray, and persuade through, an image of expertise	Engage in a discourse of pain, loss, fear Sharing and evoking emotions
Essay II: MESO *Energy realities as ideological constructs*	**The Clan**	**Tech-believer**	**Downshifter**
Main values:	Utilitarian, traditional,	Techno-utopian, individualistic	Nature centered, individual to collective, altruistic

	collective to individual		
Approach to municipal energy transition:	Rely on experts to measure the correct things, trust the existing knowledge	Facts & figures – everything can and should be measured, we can manage and control nature, knowledge is everywhere	You cannot measure everything – quality of life is not measurable by GDP. You cannot rely on all experts, new knowledge is needed
Discursive strategy:	Informal language – talk like locals	Formal language – expert language	Emotional language
Portrayed as:	Realist	Rational	Radical
Essay III: <u>MACRO</u> *Energy realities of power holders*	**The Energy Dragon**	**Domesticated Energy**	**Global Energy**
The reality – this is how it works:	The human, (consumer and business) needs to adapt to the needs of the system and serve it. "We serve the system" Electric frequency like the human heartbeat, the pulse of the nation	Independent, free from the grid. "We run the system – system should serve us" Mixture of two opposing ideologies, the neoliberal 'glocal' market and the rural traditional Smart & flexible Rural resilience	Convergence of the two earlier collective worldviews. "We are the system" Approaches national challenges and their solutions as global goals.
Who is responsible in the energy transition e.g. how are roles divided?	We, are the government and big industry experts, who maintain it steady. System experts have the knowledge Smaller actors, private companies, NGO's and consumers should obey the rules.	Individuals have the rights to choose what they want to do What unites the two discourses is the unwillingness to obey the rigid rules of government and its clerks – the current Finnish market model is perceived as limiting.	Collective responsibility Opennes, sharing, Cleantech and Greentech Neo-liberal green Knowledge comes from different sources, also outside the system

	Environmental organizations treated as 'nuisance' to system.	Progressive – Liberal discourse mixed with green climate concerns …and the traditional, 'redneck' conserving and nationalist	
ALL LEVELS	**Traditional**	**In Transition**	**Climate Emergency**
ALL LEVELS *How thing are? (regarding energy transition)*	Hierarchical (top-down), centralized-heavy-hard to change, questionable	Stuck, restricted, need for new ideas, innovations, exiting technology, need to free the market	Need for radical change, sustainability first, global challenge
ALL LEVELS *Why do we need to transform from energy current system?*	Economic benefits, work and income, landscape pressure we have to.	Economic opportunities, new knowledge and innovation, climate change drives us!	Climate change, sustainability challenges, new opportunities, no return to old ways!

The first group, *Traditional*, approach to the energy transition, stems from a more traditional view of reality. The energy system is considered hierarchical driven by top-down decisions and rules. These rules are questionable, and not always liked but this is how it works. As there is a way of doing things that has worked this far, and energy production and consumption have traditionally been centralized, the issues seem far away or heavy and hard to change. Traditional ways also seem to prefer the energy mix which is kind of a political – ideological perspective as well, including views about land use and ownership. The reasons why the energy transition should happen are found in economic benefits, work and income as well as landscape pressure we have to.

The second group, *In Transitio*n, feels stuck and restricted by the current heavy legislation and slow processes. The In Transition group includes two ideological stances that might be considered each other's opposites, namely the *Smart & flexible* and *Rural resilience* that together formed the *Domesticated Energy Myth* in essay III (see section 4.3). Similar findings have been made by Press et al. (2014: 115), where two opposing ideologies regarding agricultural practices (organic versus chemical farmers), still shared the same foundational, cultural-cognitive

legitimacy justifying reasons to continue with farming (the shared elements were: pass farm to children, hard work, stewardship, independence and no debt). Here, the Smart & Flexible, sees the energy transition reality as a contemporary phenomenon in the continuous development of the rational human. There is a need to free the market for new ideas, innovations and exiting technology to enter the system more quickly. Technology will solve most (all) problems and the energy transition is to be seen as an opportunity to modernize the country whilst saving the planet with (Finnish) Cleantech. This is the 'progressive' and liberal grouping, considering that the right way forward is to free the system and support de-centralization. Reasons to support the energy transition are economic opportunities, new knowledge and innovations as well as combating climate change.

The Rural resilience contests the top-down restrictions that are imposed upon them by government and EU, and supported by over enthusiastic visionaries such as the Smart & Flexible or even worse, the Climate Emergency group. This puts the Rural resilience ideology in conflict with all three energy realities (Traditional, In Transition and Climate Emergency) as it supports traditional ways of producing and consuming energy, but wants individual freedom and remains skeptical to green ideologies. It seems mostly compatible with the In Transition group as the search for individual freedom is tied to utilizing economic opportunities as independently as possible, without restrictions.

The third group, *Climate Emergency* – Global Energy expresses need for radical change and of putting sustainability first. This grouping is where emotions are allowed and worry, fear, anxiety and anger for the consequences of climate warming are given most legitimacy. The traditional values are questioned as they are not supportive of the change in ways that is needed (Traditional). Similarly, the growth and development through free market ideology (In Transition) is considered unable to solve the sustainability challenges faced by the global community. This is the downshifting ideology at work, combined with an idea of international collaboration. Greentech is needed, but in a way that serves humanity and the planet. Thus, reasons to support the energy transition (even if the notion of transition might be questioned) are climate change, sustainability challenges, new opportunities for downshifting lifestyle as well as the belief that there is no return to old ways.

5.2 What kinds of rational energy myths circulate in the Finnish energy agora?

In this section, the dominant rational energy myths across the three (micro, meso and macro) levels in the agora framework are revealed. The findings from the three essays have been corroborated to answer the question: What kinds of dominant rational energy myths and national myths can be found in the energy agora?

A transition can be consider involving constant negotiations, "*a translation process that acts as metaphor from linguistics and connotes an interaction that involves negotiation between parties and reshaping what is finally transmitted e.g. institutionalized"* (Zilber 2006: 283). Viewing institutionalization as a process where actors are carriers of institutions (Zilber 2002, Maguire and Hardy 2009), implies that people draw from their personal cultural toolkit (Zilber 2006). In other words, peoples individual set of beliefs are affected by the collective systems of mental models (Haase et al, 2009). Rational myths borrow structures (Thompson 2004) or plots (Stern 1995) from wider and more generic myths, these often having national connotations and cultural meanings (Zilber 2006). They explain reality from a larger perspective than, as in this case, energy transition. Dominant myths in different nations and cultural contexts share similar mythological origins (Campbell 1973, Campbell 1990). One of the strongest common plot of universal mythologies is explaining the origin of humanity and '(wo) man's place in the world' (as discussed in section 2.3). Figure 7 shows the way this research approaches the process of rational energy myths translating from national myths, which again translate from timeless mythologies (Campbell 1990), or at least borrow fragments of their original structures (Stern 1995, Pinkola Estés 1996).

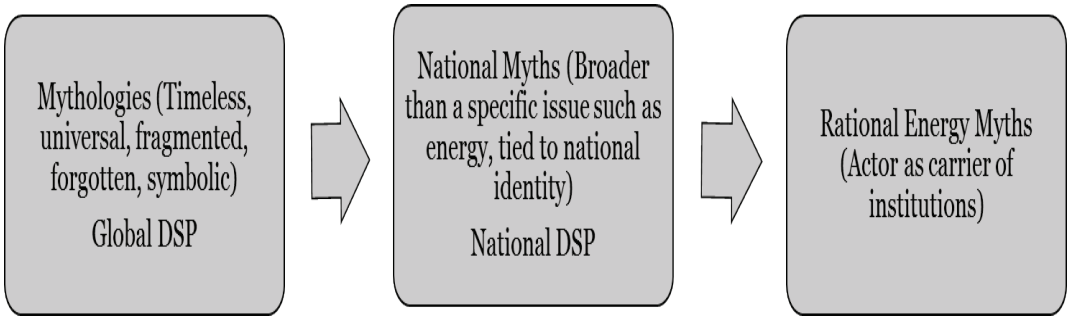

Figure 7. The translation process – from mythologies to myths

To explore the deep structures of mental models, we use the concept of national myths and rational energy myths. These are discursive constructs, imbued with glimpses of the inner landscape of an individual. Thus, they reflect collective,

cultural-cognitive beliefs and mental models, which construct the intangible field of the agora from where the legitimate institutions in the regime of a socio-technical energy marketing system draw their logic and practices (see figure 8).

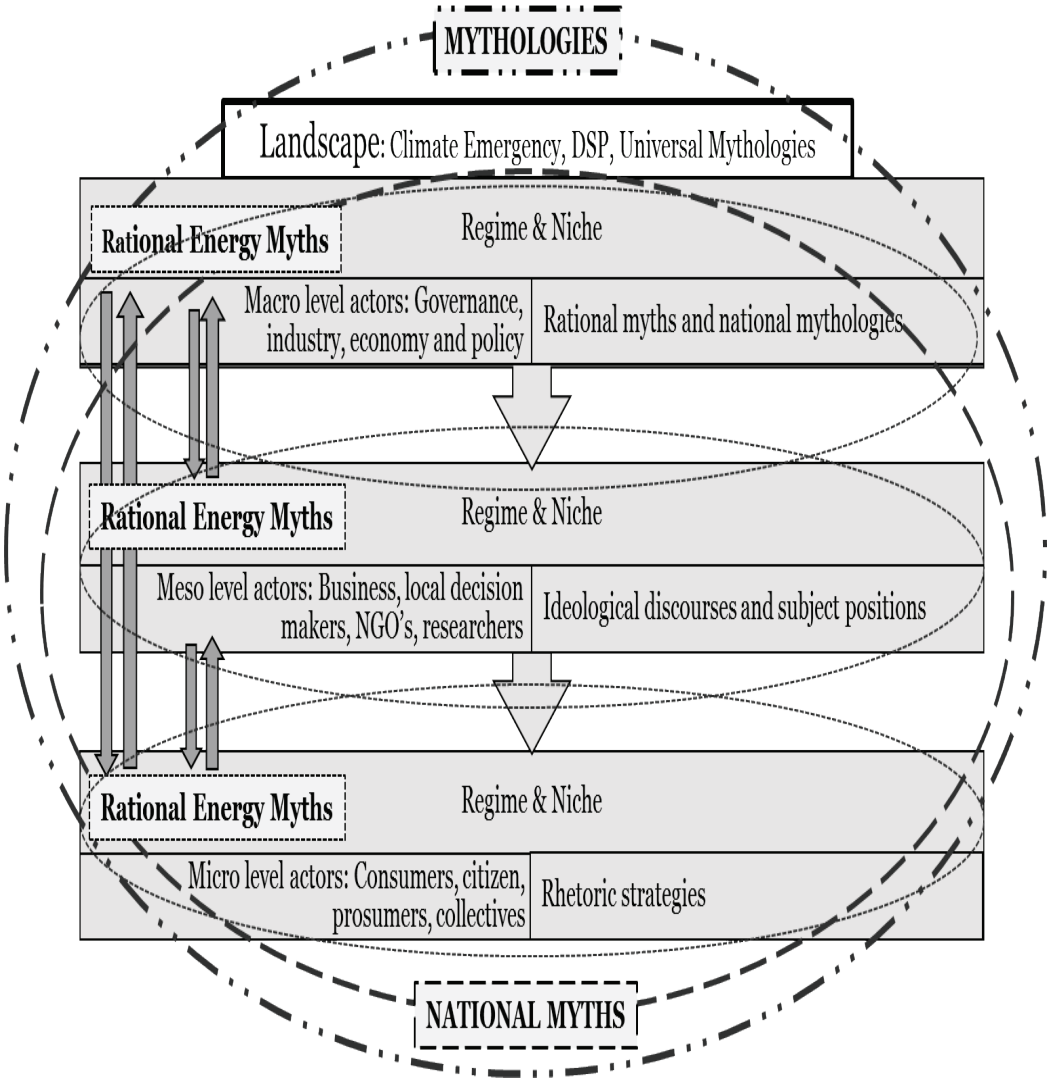

Figure 8. The discursive "mythical" Energy Agora

Figure 8 shows how timeless, universal mythologies exist on the landscape level of a socio-technical energy marketing system (a city and its energy system) and its energy agora (the square in the middle of that city). Following the description of the landscape level in the MLP (Geels 2004), it is where slow moving trends such as social paradigms are situated and thus also the place where universal mythologies might be placed. National myths cover all levels of actors (micro, meso and macro) participating in the energy marketing system. Thus, the national myths also cover the entire regime and niche levels of the MLP, as they are embedded

into the legitimized institutional structures and practices (regulative, normative and cognitive) of the regime. The institutional structures obviously affects the dynamics in the energy agora (think about the written and unwritten social rules that dictate how people ought to behave in the agora on a market day). National myths are shared and interpreted similarly by actors socialized into a socio-cultural system and can be expected to form part of their personal cultural toolkit (Zilber 2006). Finally, the rational energy myths, produced by individual actors (considered as carriers of institutions), might draw from distinct national mythical plots in the process of translation to other actors (Zilber 2002). Thus, market shaping rational myths (might) draw their plots from national myths and, even further from universal mythologies.

To find the energy myths circulating in the Finnish energy agora, the rational myths from the third essay were used as a starting point. The idea was to explore mythical structures in the findings from essay I (micro) and essay II (meso) level and see how they related to the findings from essay III (macro). As I was looking for mythical structures, the mythic plots used by Stern (1995) proved helpful. Sterns (1995) work on consumer myths as plots is organized by four categories according to Frye's taxonomy (1957). Stern recognizes that there are four mythic plots: comedy, romance, tragedy and irony (satiric). In Sterns work, the plot types embody structural links between consumption myths and those found in other cultural myths. This logic is similar to the idea of rational myths, national myths and mythologies used in this thesis.

The analysis part turned out to be a very interpretive process, as the three sets of findings differed in how they had been approached and presented. I found that the subject positions in essay II and the rhetorical strategies in essay I represented distinct socio-culturally accepted or contested strategies, used by actors to discursively navigate their reality of energy transition. Thus, these "coping strategies" expressed distinct manners of dealing with the world and others. Surprisingly, the findings from the three essays organized according to the four mythic plots, showing similar mythical structures throughout the three levels of the energy agora (see table 8).

Table 8. Energy myths in the Finnish agora

Rational Myths Essay III	Rock solid	Big brother	Smart & flexible	Rural resilience	Global village
Macro National myth Essay III	When the uranium cracks – through the grey stone	When Finland became a competition state – and fell off the tree	I am a yuppie, hippie, punk and very high fly	The swamp, the axe and the man	We are the world – we are the children
Meso Subject position Essay II	Show me the facts and figures! *Rationalizer*	What's in it for me? *Realist*	Sometimes radical changes are needed! *Changemaker*	Rather incremental changes please! *Worker Ant*	We need to respect earth's boundaries! *Treehugger*
Micro Rhetoric strategy Essay I	Who's got the power? *Moral*	Does this make any economic sense? *Evidence* Who can be trusted? *Moral*	Does this technology work as intended? *Evidence*	What do they think they are doing? *Moral* Is this fair? *Victimization*	What will happen to people, animals and planet? *Evidence* What if this is dangerous and something goes wrong? *Victimization*
Mythic Plot	***Romance***	***Ironic***	***Comic***	***Satiric***	***Tragic***

It seems that the five rational energy myths from essay III find similar plot structures throughout the three levels of the energy agora (findings from essay I and II): The Rock solid fits well into the plot structures of the romance myth that lives in the nostalgia of preferring the past. The Big brother teams up with the ironic myth and here, change is accepted but there is no trust in appearances. Smart & flexible shows most positivity regarding the future of energy transition and combating climate change, and fits the comic myth as it believes in the transformation and evolution of society and that technology will solve the big challenges. The Rural resilience follows the plot of the satiric myth and makes fun of what it considers as the nonsense of high tech or green transition visions. Finally, the Global village warns that mankind is heading towards tragedy if they don't change their actions and call for collective effort to avoid disaster (or survive).

5.3 How to use the energy agora framework to uncover mental path dependencies and lock-ins?

As we have learned in chapter 2, institutional work is market shaping activity that leads to institutional maintenance or change (Baker et al, 2018). Path dependence and lock-ins are central challenges that slow down sustainability (energy) transitions (Markard et al, 2012). Path dependence in itself is nor good or bad, is it a pre-requisite for social life (Layton and Duffy 2018). What becomes a problem is when path dependence maintain unsustainable lock-ins usually related to technological choices and economic (sunken) investments.

In this thesis, path dependence is approached as mental models which are social constructs. Reality as a social construct, means that it is affected by complex, socio-cultural-cognitive dynamics inscribed into the legitimate institutions of a system (Berger and Luckmann 1967, Kilbourne et al, 2009). Discourses are central in constructing reality (Fairclough 2007) and in this thesis they are approached as rational myths (Zilber 2006). The rational myths translate from a broader legacy of socio-cultural-cognitive meaning structures embedded into national myths, which again draw from timeless mythologies (Campbell 1990). Myths and mythologies resonate with individuals on conscious (rational) and subconscious levels (Thompson 2004). People are also socialized into certain belief systems and mental models since birth (Humphreys and Thompson 2014, Giesler and Veresiu 2014). This means that many taken for granted assumptions about energy realities, the dominant mental models, exist inside the legitimate institutional structures of a socio-technical marketing system (the regime). As the DSP is deeply embedded into the main institutions of western societies, it is hard to question as it forms part of the dominant worldview and 'how things ought to be' (Varey 2012).

Now the third research question was; How to use the energy agora framework to uncover mental path dependencies and lock-ins? Figure 9 places rational energy myths, national myths and mythologies into the agora. It builds upon the logic presented in earlier section (5.2) and presented in figure 8, the discursive mythical energy agora. Here I suggest, that we need to understand 'the roots' to the cognitive landscapes of actors, who might have various roles (consumer, prosumer, politician, business owner) in the energy agora. So, to gain more insight into transition dynamics behind unsustainable path dependence, we need to look into the intangible, paradigm imbued and opaque inner landscape of actors.

In other words, the subconscious, socio-culturally constructed belief-structures and mental models, surface as possibly (un) sustainable path dependence and lock-ins. Here I refer to the findings of the third essay, where path dependence

was approached as a social mechanism (Layton and Duffy 2018) and as institutional work deliberately undertaken by system actors (Baker and Storbacka 2018). It could be suggested, that the energy agora is the place where mythical work happens. I suggest that the rational energy myths might have power to shape socio-technical marketing systems. This kind of subconscious shaping is called mythical work in the energy agora. It is institutional work on both subconscious and conscious levels, translated to the collective by actors who are carriers of institutions (Zilber 2006).

We need to recognise that institutions are a product of routinized activities and understandings enacted by individuals and organizations (Lawrence et al, 2013) at the same time as they draw from these institutions (Maguire and Hardy 2009). Mythical work could be considered as an individual to the collective, micro-macro mechanism that might be self-reinforcing (Haase et al, 2009). The danger of maintaining unsustainable path dependence lies in keeping repeating the dominant plots of the agora. The continuous reinforcement of dominant intuitions (the regime) that maintain the DSP tied to material growth and competition, might keep actors inside a big paradigm loop. This means that the mythical work, translated between actors in rational myths, keeps on drawing from dominant national myths that again are reinforced by mythological structures that might reinforce the DSP.

As discussed in section 2.3, the question might be if our mental models originate from a mythology that is alive or dead. One is inclusive and makes the person participate in the mystery of life as a co-creator, the other is hierarchical, giving the individual the role of a worshipper and bystander (Campbell 1990). What if the role of the worshipper could be compared to the role of a consumer in today's modern society? If the landscape of the agora carries the DSP of Western society, it might be more likely that the mythological realm is tied to 'worship and patriarchy', giving interesting insights into the idea of how responsibilities are shared in western society. This resonates with the critique by Giesler and Vereisu (2014) on the responsibilization of consumers by global corporations.

In this thesis, I suggest that path dependence is translated through rational myths by actors who are themselves carriers of institutions (Zilber 2008). Thus rational myths, circulating in the energy agora, have power to shape the evolution of (un) sustainability transition pathways. Mental models maintain certain path dependence as they are part of deeper socio-cultural structures or the 'cultural DNA' (Syrjälä et al, 2014) which in itself is not questioned by its carrier.

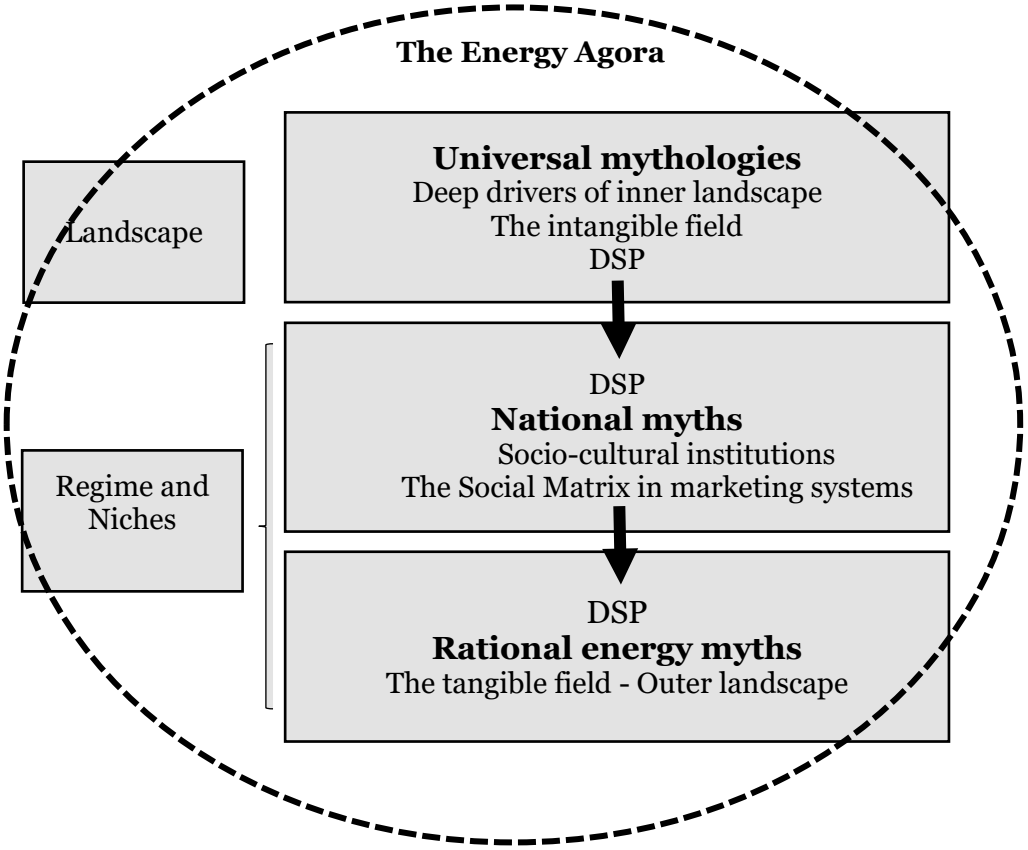

Figure 9. Different levels of myths and mythologies in Energy Agora

Figure 9 demonstrates the different types of myths as well as the mythological sphere from the marketing systems and multi-level perspective. What it shows is that national myths and rational myths are connected and translate culturally inscribed plots. These draw their structures from the landscape and its timeless mythologies. Thus, myths are plots of everyday life, drawing from the larger, mythological landscape – which might be where the DSP translates into the dynamics of the agora. This relates to the idea of path dependence and lock-ins as mental models that maintain un-sustainability. Meaning that even if people, on a conscious level, know things should change (listen to Greta!) the subconscious mental models, tied to the DSP, might work against taking climate action. As the dominant institutional structures of a regime are continuously reinforced, the DSP of the old system remains.

Exploring the dominant energy realities in the Finnish Energy Agora (see section 5.1) three dominant groups were found namely the Traditional, In Transition and Climate Emergency. Reflecting these findings to earlier research, main barriers to sustainable transition have been found in the way people stay in inaction (Gifford 2011, Stoknes 2014) which resonates with the Traditional - keeping things as they

are discourse. Another action that has received critique (Geels 2020, Markard et al, 2012) is how governmental and corporate actors keep on trying to solve the big challenges with incremental solutions to maintain the regime which again resonates with the Traditional perspective. On the other hand, there is a need to understand new innovations and their environmental impact before they enter the market (Antal et al, 2020) and here the danger might lie in the group that puts its trust in technology to save us - In Transition.

The need for rapid and radical transformation of the current energy system would require instant action on all levels of the socio-technical energy marketing system. This would imply that the radical change – Climate emergency 'reality' would need to dominate the energy agora. How come it doesn't? Understanding the worldview tied to the dominant DSP (see section. 2.1.4) also tells us that the values and ideologies in the Climate Emergency discourse, are the furthest from the dominant structures. As the DSP is institutionally inscribed it is the legitimized worldview, communicated by media and institutional actors. As this thesis shows, it might be subconsciously translated between actors as mythical work. It might help to consider the DSP as an old wall that has been under construction for a long time, brick by brick. De-construction, as in removing one brick, is difficult as the layers depend upon each other. Breaking a paradigm would entail 'blowing up the entire wall' and creating something new. But, as this is a psychological question it becomes much harder as it means losing one's personality (Campbell 1990: 93). The human mind sticks to what it knows (Gifford 2011, Stoknes 2014) and fears the unknown.

5.4 How the energy myths challenge the energy transition?

Sustainability transitions are goal-oriented as they address persistent ecological challenges, but the ways to reach those goals are usually not clear or more exactly, pretty messy (Köhler et al, 2019). There is a call to address cultural-cognitive aspects of micro to macro dynamics in socio-technical systems transitions (Geels 2020). This also refers to the process of legitimization that might result in the lock-in of certain practices and mental models into the institutional structures of a socio-technical regime (Fuenfschilling and Truffer 2016). Also, Antal et al. (2020) have been calling for more focus on 'unsustainable trends' to help curtail harmful socio-technological changes before they become entrenched. This is an important perspective, as the dangers of the DSP in shaping transition trajectories and

maintaining path dependence lies in new innovations just causing new types of sustainability challenges.

In this thesis, I have been curious about how the macro-level discourses place experts (see essay III) and 'who has a say' in the energy transition. This also entails the dominant energy realities, and how they are embedded in the DSP, something that was discussed in section 5.3. The findings points to the existence of a DSP that functions as a base for multiple mental models, expressed in the constructs or plotlines of rational energy myths. Taking the perspective that reality is socially constructed the findings in this thesis pave way for more questions: What if the timeless mythological set-up, found in the landscape of the MLP, is one built around patriarchy and dominance? Does it mean that the extractivist mindset behind colonialism and capitalism is inbuilt in our "western cultural DNA"? In that case, how can we expect actors in key transition positions (including transition managers), socialized into the DSP of Western societies, to be able to act according to what climate emergency really entails? The transformation required is so radical that it freezes the mind of people, and leads towards a future unknown. People in key positions, are asked to take responsibility in a manner that implies actions contradictory to the core beliefs of the very DSP they are part of.

I have suggested in this thesis that rational myths are embedded in the institutional structures of socio-technical marketing systems, and the mental models are acted out in the agoras. Thus, on a surface level, distinct myths may challenge the material and social set up of the regime, but fail to address the root issues to sustainability problems. As a paradigm shift entails transforming a system starting from its paradigm, and the paradigm is an unquestioned, legitimized truth things get complicated. As stated by Sheldrake (2012: 43) *Archetypes are more powerful when they are unconscious because they cannot be examined or discussed.*

The rational myths follow cultural plots: The Rock solid – romance myth that lives in the nostalgia of preferring the past; Big brother – ironic myth accepts change but does not trust appearances; Smart & flexible – comic myth believes in the transformation and evolution of society and that we (technology) will solve the big challenges; Rural resilience – satiric myth makes fun of the nonsense of the ideals of change; Global village – tragedy sees mankind doomed by their actions and a need for a collective effort to avoid disaster. The rational myths found in the agora, reveal separate plots including differing ideologies and mental models. The three energy realities in Finnish energy system (section 5.1): Traditional, In Transition and Climate emergency. Still, the energy realities show, that there is a shared path dependence tied to materialism, competition and growth. Only the Climate

Emergency reality and Global Energy rational myth includes notions of more radical transformation, as they refer to downshifting and ecological values. As discussed earlier, it is also the myth that challenges the dominant paradigm.

In other words, the main collective mental models do not differ in their core assumptions, tied to the same institutions; the political, economic and technological, they just differ in how to relate to those (Kilbourne et al. 1997). To avoid mental path dependence, that keeps systems locked-in on unsustainable trajectories, more awareness about deep mythological drivers is needed. Especially, there is a need to pay attention to the missing myth(s) which are typically not allowed space in the agora and even if present, usually lack the institutional support as they are not legitimized. Thus, there is not enough power to shape the energy transition towards sustainability.

If sustainability actions are prevented by path dependent mental models tied to the DSP, we might also ponder about how to break the loop. White et al, (2019) argue that sustainable behavior is a question of self-control, as the transformation means changing a habit. They suggest that people with a "fresh start mindset" are more inclined to change unsustainable behavioral patterns. The downside to this finding is, that most people don't seem to exhibit this mindset. Approaching change from the micro, consumer perspective, we need to consider that most consumers will remain in inertia until a new way of doing things becomes the new default. This puts the responsibility for accelerating sustainable action into an interesting perspective. Who are the actors with the capacity to respond responsively?

5.4.1 Mythical work

Mythical work might prove useful in telling transformative stories or narratives in a way that breaks down the core mythical plots tied to the dominant DSP. Marketing, and especially branding, when it uses cultural disruptions as an entry point (Holt 2004), is tapping into the mythical world of the human sub consciousness (Campbell 1990). When these cultural tools are used to serve the DSP, they provide more material for the consumers to maintain and construct their identities through the consumption of 'things'. Thus, it moves further and further away from the original ancient mythologies which were to provide people with inner tools to navigate the outer world (Campbell 1990). One might suggest that the transformative tools we now search for outside, in the material world, might be non-material inner tools. This is the essence of the old teachings from all around the globe, the meditation and cultivation (and the lack of it) of the inner landscape

of the individual is what manifests and materializes on the outside as thoughts, beliefs, values and behavior / action. Everything is created twice.

The idea of Mythical work can be divided into inner landscape and outer landscape work. This approach provides a deeper understanding about underlying cultural-cognitive commitments that can either hamper or further the adoption of more sustainable energy behavior both on individual as collective (systems) level. By providing an agora map for key actors (transition managers) to understand how the DSP and mental models participate in shaping transition trajectories, it also paves way for re-shaping towards sustainability. But first, it is important to know who can manage transitions without falling into the paradigm loop.

Inner landscape work suggests that paradigms are pathways. This is the deep end of the iceberg work. Disruptions are uncomfortable as they force individuals out of their comfort zones and to question their own world views. The DSP is embedded in the social institutions as intangible, unquestioned individual-collective belief-systems and mental models. Radical disruptions, either technological or social, that go against the legitimized and normal are bound to activate highly emotional reactions in individuals. There is a need to work on these deep-rooted drivers of energy realities, firstly with individuals in positions of managing transitions and then bring it to practice in different transition arenas.

Outer landscape work is the tip of the iceberg, the normalized and legitimized socio-material reality we create as a result of inner landscape beliefs. The institutions, behaviors and technology we experience in our socio-technical systems are first created in our minds, agreed upon collectively and finally constructed materially. The socio-cultural belief-systems draw from and are embedded in the dominant material-technical system (regime) and maintain certain path dependencies (institutional rigidness, lock-ins and myopia). This is why outer landscape work follows inner landscape work, and we might use the dominant cultural-cognitive 'agora map' to navigate and design transformative interventions.

5.5 Contributions of thesis

The main contribution goes to the field of Macromarketing and the earlier work on marketing systems theory and dominant social paradigm(s). Macromarketing focuses on the study of marketing systems, the impact of those systems on society and the impact and consequences of society on marketing systems. Marketing systems are seen as having direct impact on societal well-being (quality of life) and on environmental sustainability.

Macromarketing's perspective in the Anthropocene participates in the discussion about the transformative role of marketing in creating pathways to adaptation and mitigation. While previous research in the field has found that the dominant social paradimg of western socie-ty affects sustainability outcomes in marketing systems, there has not been much research on uncovering how the secret hand works. Layton recognises the bounded rationality of actors, involved in the social mechanisms, and affecting the evolution of marketing systems.

This thesis creates more understanding about the dynamics in the social matrix, by exploring and demonstrating how dominant beliefs and ideologies travel as mythical constructs, being translated by actors who are carriers of the same institutions they aim to change. Thus the Energy Agora Framework provides a systemic, micro, meso and macro perspective into the social dynamics of marketing system evolution. It also suggests how the DSP is maintained in the socio-cultural institutions by 'mythical work' undertaken by system actors in different roles. This mythical work is not consciously 'understood' by the actors themselves, as it stems from the subconscious level of the mind, the space where the mythical constructs reside.

This thesis also participates in the search for solutions to bridge the green gap in studied in sustainability marketing and TCR. There is a call for more approaches that highlight socio-cultural and situational contexts that unveil hidden or little known social problems, seeking their deeper understanding and attracting public attention and resources. Here, we use 'markets as the central organizing principle' (the energy agora) to understand the big picture where micro-macro interactions take place. Findings show that there is lack of diversity in the energy transition roles, and that the DSP legitimizes certain discourses whilst downplays others affecting energy (consumption) choices.

Central question stemming from the intersection of CCT and macromarketing are how consumption participates in the constitution of society and how the consumption – production dilemma should be approached. This thesis has borrowed the cultural approach from CCT to help understand the forces structuring consumption. Earlier research on market-place myths and consumer mythologies opens the creative world of using marketing tools and thinking to explore the institutionalization as translation process. Using the transformative logic of cultural branding and myths has been done at the consumer and business level. Here we acknowledge the dialogical relationship between consumers and market structures and 'test them' in the agora, taking a systems perspective. Thus we explore how the 'context of the context' operates in shaping energy trajectories (or maintain path dependence).

Researchers in these fields have criticized the responsibilisation of consumers, arguing that the socialization into consumption cultures, makes people answer to challenges by consuming more. States and corporations should take more responsibility for the sustainability out-comes. This thesis shows how the same dominant institutional logics; ideologies embedded into mythical constructs, circulate the energy agora and translate between consumer, business and governance levels. As long as our basic, unquestioned values are tied to competition and material growth, we remain stuck in an unsustainability loop. Breaking this loop is as hard as breaking a habit as "we have consumerism in our DNA", good news is we can do it, but it requires both inner and outer work. And if all actors, regardless societal roles, are carriers of the same DSP, responsibility belongs to each actor with the ability to respond in a given context.

The quickly evolving field of sustainability transitions research covers multiple perspectives on change. Out of these themes, understanding transitions includes the MLP, as well as the interest for institutional processes in shaping the regime, e.g. dominant system and its rules. There is also a call for furthering the understanding of the micro-macro dynamics, or the 'whole system reconfigurations' as the complexity inherent in sustainability transition processes is hard to grasp from one level of analysis. Researchers also raise the question about the practical impact of the research, "how to engage with real-world actors, systems and transitions" and "can and should researchers in the field be part of transition initiatives and apply ideas of transitions management in pilots, living labs and action research"?

This thesis provides a perspective upon the DSP and the way it maintains path dependence, hampering sustainability initiatives from a level that might be difficult to pinpoint, as it is embedded into the mental models of the actors. It also suggests that transition researchers and managers – people in intermediary roles might benefit from considering what mythical work implies in their own work. The energy agora framework is suggested as a tool to reveal path dependence and lock-ins that shape transition pathways. The agora provides a frame for making the intangible, social mechanisms visible by introducing mythical work. In section 5.4.1 there is also a suggestion about how to enable deeper sustainability in transition processes through "inner and outer landscape work".

5.6 Limitations and future research suggestions

This thesis has taken a multidisciplinary approach drawing from various fields of research knowledge and theoretical approaches. Creating the Energy Agora Framework has required venturing into the fields of CCT, TCR, sustainability marketing and sustainability transitions as well as macromarketing systems. Thus, one limitation of this thesis is the lack of in-depth knowledge in all the perspectives used to create the energy agora framework and capture the dynamics between the micro, meso and macro, system levels.

I also acknowledge that the work on sustainability rhetoric's and discourse analysis done in the fields of Energy Humanities, Energy History and Political Ecology have not been included into this work. These are important areas that will strengthen the discussion and analysis in essays two and three as they will be developed into articles.

As stated in chapter 3 regarding research paradigm and methodology, using social constructionism and qualitative inquiry (discourse analysis) as approach has made the analysis process highly interpretative. That requires reflexivity from the researcher upon her own biases. I have situated myself as a researcher within the energy transition context using sustainability as a critical lens. This obviously has influenced the way data has been interpreted as well as the findings presented and discussed. The empirical data consists of so called raw data where the researcher has recorded and observed but not interfered. The data from the three levels, micro, meso and macro, provide "snapshots" of the Finnish energy system inside a given time period 2014-2018. Thus the data cannot provide enough evidence for making any definitive statements about the Finnish energy transition.

Regarding future research suggestions, the agora framework will be further developed and could be used to support transition management. Shaping sustainable trajectories by unlocking mental path dependence needs more attention as mental models lie beneath materialised outcomes (such as choices of technology investments).

There are interesting questions regarding myths and mythologies as carriers of DSP and how to re-tell stories towards sustainability. How aware should the teller of a transformative myth be of his/her own DSP? Do we need more mythical, inner and outer landscape work and what does it look like in real life settings?

Questions regarding the construction of gender roles, how that relates to diversity in general and what this really entails for sustainability transition have been popping up along the way of exploring the energy marketplace, its ideologies and

myths. The significance of understanding gender and diversity in the evolution of socio-technical (energy) marketing systems might be bigger than we realize. Why? I am not necessarily referring to the feminist discussion here, but a deeper understanding of differences between masculine and feminine qualities, and how today society is constructed upon very masculine premises, the mechanistic worldview, that might restrict our approach to diversity as well as creativity and thus innovations. An example would be how people are allowed to express feelings and emotions in questions relating to environment, choice of technology that might have an impact on the place where you live (See essay I and II). Marketing can also be viewed as a technology of gender or as an institutional discourse that has the power to control the field of social meaning, and thus, to produce, promote, and implant representations of gender (de Lauretis 1987: 9). To understand what it takes to reach a balanced sustainable system, might entail more knowledge about the different aspects of 'yin and yang' and how they support each other.

Macromarketing as well as sustainability marketing, including CCT and TCR, should take their socio-cultural, micro-macro marketing knowledge into the field of sustainability transitions. This gives a new perspective for zooming in and out of the bigger picture, upon the social dynamics and the impacts of DSP on sustainability outcomes. The research field that has closest connection to policymakers in a certain matter, such as the energy transition, has the best opportunity to affect institutional structures of regimes.

6 CONCLUSIONS

"New levels of organization emerge and their emergent properties go beyond those of the parts that were there before. The same is true of new ideas, or new works of art" (Sheldrake 2012: 52).

This aim of this dissertation also related to the macro - 'wicked' challenge of why the sustainability transition of energy systems still too slow to reach climate targets: What happens in the transition process that 'hijacks' deep sustainability before it can transform the system? How come we maintain unsustainable systems and choose innovations that cause more environmental harm in trying to solve the emission challenges?

A sustainable renewable energy shift requires people to adopt new, greener practices and technologies. Changing personal and collective habits or practices refers to non-material action where the result of interventions is seen as a change in norms and values, entailing more or less a paradigm shift towards a 'new environmental paradigm'. Triggering such a change, enabling this kind of transformative process, is challenging, as processes and people are unpredictable and the energy system heavily path dependent. Thus, there is a high degree of uncertainty involved as the changes required are such that there are no earlier models to follow. According to Scharmer (2014: 8) "analysis paralysis" refers to the fact that the prototype is not the stage that comes after the analysis; it is a part of the sensing and discovery process in which we explore the future by doing rather than by thinking and reflecting. When creating a technical or material innovation, the prototyping part becomes a concrete, miniature test of what works and what does not, that gives the creator the possibility to make changes and draw conclusions in a certain space and time. When creating social, intangible (innovations) pathways, and the prototyping is action, the (innovation) action happens in the space and time that its context allows. In other words, it is a continuous learning process where nothing is set in stone and all actors included affect the outcome. It is exploring the future by doing, sensing and following intuition. Thus, a social innovation, a concept or a shift, cannot be fixed, it is a living creation molding itself according to every unique context. That also creates the question of what is manageable and what is duplicable?

According to Sheldrake (2012) and Scharmer (2014) the deeper changes start in the mindset of people, understanding and sensing a deeper purpose. This way of "sensing" and attuning to work towards a common, yet not concrete goal is something that has not been researched that much in marketing settings. Myths borrow their structures from much older stories, the mythological realm, which is

timeless and universal. Mythologies are the timeless stories imprinted in the human collective subconscious, when they are told have the power to activate the inner world of the listener (Campbell 1990, Pinkola Estés 1996). For decades, experts in marketing and branding wizards, have used these timeless constructs to make us consume more (see Holt 2004). The good thing is, if the myths have so much power to keep us hooked to products and services we don't need, then they can also help us get hooked on life instead of stuff. This is why more inner landscape and outer landscape, mythical work is needed.

According to Dumont and Wilson (1970), theory formation can be divided into three phases: Implicit theory, theory sketch and explicit theory. The first phase, implicit theory, consists of isolated abstract concepts and lack a definitive rationale. In this thesis, the energy agora framework has been developed and the legitimization process used to understand how dominant mental models, tied to the DSP might circulate in an energy system. Thus, I present various concepts and test how they might work in the agora framework and recognise that this is still the first prototype.

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Essays

Essay I:
Von Koskull, C., Berg, P. & Gummerus, J. (2018). "Wrath in consumer oppositional activism". In Syrjälä, Henna & Leipämaa-Leskinen, Hanna (Eds.). *Seven deadly sins in consumption*. Edward Elgar Publishing.

Essay II:
Berg, P., Narayan, R. & Rajala. A. Exploring New Business Opportunities in Energy Sector - Network Configurations for Sustainable Energy Marketing Systems

Presented in:
International Sustainability Transitions (IST) 2019 Conference, Ottawa, Canada

Essay III:
Berg, P. Market Shaping Energy Myths

Presented in:
Macromarketing Conference 2019, Cleveland, Ohio, USA

Essay I: Wrath in consumer oppositional activism

Von Koskull, C., Berg. P. & Gummerus, J.

Abstract

This chapter explores wrath in the area of consumers' collective opposition of wind power by employing rhetoric analysis revealing the explicit verbal forms of wrath. Through a rhetorical lens, the chapter analyzes a case in which resistance succeeded in putting an end to the development of a wind power park in a rural area in Finland. The chapter advances knowledge on how wrath, as a moral emotion of injustice, is expressed in public. The findings show how wrath underlies the ways in which activists try to influence their adversaries as well as to mobilize support among consumer allies. In particular, wrath is expressed through three rhetorical strategies: morality, evidence, and victimization rhetorics. Wrath is visible in "ethos appeals," but is also used as a resource in framing arguments of more rational as well as emotional characters. Overall, the findings suggest that wrath plays an important role in influencing and mobilizing consumer resistance.

Keywords: Consumer oppositional activism, Emotions, Wind Power, Energy Transition, Resistance, Rhetoric analysis

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6. WRATH
Wrath in consumer oppositional activism

Catharina von Koskull, Petra Berg and Johanna Gummerus

INTRODUCTION

Wrath is a strong emotional reaction, which involves an uncomfortable and hostile response to a perceived provocation, hurt, or threat (Videbeck 2006), and which consumers often express in verbal form, that is, through rhetorics. Rhetorics are powerful tools for infusing change in public discourses and while making decisions based on lengthy rounds of argumentation back and forth. Despite their importance, wrath rhetorics are seldom discussed in consumer research, which has focused far more on the causes (see for example Nyer 1997) and consequences of wrath. For example, wrath may lead to consumer retaliation (Bougie et al. 2003), negative one-to-many word of mouth (WOM) (Wetzer et al. 2007), and/or switching (Bougie et al. 2003). Nevertheless, while it is clear that wrath takes verbal forms beyond one-to-many WOM, such as ongoing discussions, research into such matters falls short.

In the present chapter, we describe the formats of wrath rhetorics in collective consumer opposition against wind power parks. Researchers have recognized the power imbalance between consumers and energy companies and the fact that energy is more or less a necessity in Western societies, highlighting the public interest dimension in wind energy decisions (Gill and Creutzfeldt 2017). There is even a potential concern here for human rights and social justice, when the state becomes an indirect party and consumers face private energy producers (Gill and Creutzfeldt 2017).

Our chapter adds to the previous research in three ways. First,

whereas earlier research has focused on the negative nature of wrath, we argue for its positive, energizing role. Second, wrath is typically studied at the individual level, while we investigate it at the collective level. This reveals that wrath is not only driven by self-interest, which would make it sinful, but also reflects a collective, partially other-directed need to shield the community and its members from wrongdoing. Third, wrath is usually conceptualized as a reaction to a perceived wrongdoing in the past, whereas we show that wrath and related negative experiences also exist as preemptive reactions towards future threats.

Paying special attention to situations of collective resistance, this chapter presents new insights into the rhetorical tactics in which consumers engage to express their wrath and influence the public discourse. First, we will discuss wrath—particularly in relation to sin—and its emergence. Then we consider wrath in consumer opposition. In the empirical section, we discuss the case study (a wind power park initiative), the material used in this chapter, and our analysis. We conclude by discussing the findings and our contribution to research in the area.

WRATH

In biblical terms, the sin of wrath (Latin, *ira*) concerns feelings such as anger, indignation, bitterness, fury, and even snorting madness (International Standard Bible Encyclopedia; henceforth ISBE). Wrath becomes a sin when it is directed towards "an innocent person, when it's unduly strong or long-lasting, or when it desires excessive punishment" (Catechism of the Catholic Church: 2302). Interestingly, wrath can be sinful or not sinful. When wrath is *righteous* it is not sinful, but is rather referred to as a duty—man *must* "hate evil" (Psalms 97:10 in ISBE)—and thus has been ascribed some value if caused by injustice (Kemp and Strongman 1995). In comparison to the other biblical sins, wrath is the only one that does not always relate to self-interest, and thus it can emerge as a reaction to the misdeeds of others (Evans 2017). This is also in line with modern perspectives on wrath. Hence, people do not feel angry only when they feel they have been provoked or hurt, but also when someone they care about has been offended. Wrath is also evoked when the person understands the nature of the angering event and

its cause, as well as when such cause can be attributed to someone else.

Consumer research has treated wrath in the same way as anger, which is a negatively valenced emotional state, leading to detrimental effects for firms such as complaints, jay customer behavior, or switching (Funches 2016). Most consumer research focuses on anger as a reaction to a personal, negative experience, particularly wrongdoing for which someone else (typically a firm) is to blame (see for example Funches 2016; Watson and Spence 2006). Anger is a reactive outcome of perceived unjustness on the part of someone else, whereas another negative emotion, fear, is associated with future uncertainty (Watson and Spence 2006).

So far, consumer research has predominantly studied anger through appraisal theory. Appraisal means the process of judging whether an event has a significant impact on one's wellbeing (Nyer 1997), and it can relate to a past or a future event. Wrath may also have various shades, some of which are more cognitively oriented than others. As an example, Goodwin et al. (2000, p.79) suggest that "the anger that one feels toward an inanimate object that has just fallen on one's toe is not the same anger one feels toward a politician caught in a lie." Also, some appraisals require little cognitive processing, whereas others require more (Goodwin et al. 2000). Emotions are seen as an intrinsic aspect of cognitions, beliefs, and moral judgments: Emotions can be "mobilized to manage meaning as well as meanings can be mobilized to manage emotions" (Moisander, Hirsto, and Fahy 2016, p.5). The most powerful determinant of an emotional reaction following appraisal is outcome desirability, referring to assessment of the positivity/negativity of a situation in terms of a personal benchmark, based either on goals or on overall pleasantness (Watson and Spence 2006). Event appraisal further includes causal agency (Roseman 1991), or the person or actor who has control over the event (in our case building the wind power mill); fairness, that is, how "morally appropriate" the event is (Smith and Ellsworth 1985), and the control that the agent is perceived to have over the outcome. In appraisal theory, appraisal clearly links to a personal assessment of the event, highlighting the individual focus of this theoretical lens. The collective aspect of wrath has foremost come up in terms of consumers influencing each other through negative word of mouth (Bougie et al. 2003), rather than rich rhetorical tactics in a public discourse setting, as in the present case. Hence,

we turn here to consumer activism, which is social in nature and can explain consumers' collective responses.

Wrath in consumer activism

A consumer movement is a kind of social movement, whose goal is to challenge and transform aspects related to consumption (Kozinets and Handelman 2004). Kozinets and Handelman (2004) suggest that the following characteristics represent any social movement in which the "activists publicly portray (1) their goal, (2) themselves, and (3) their adversary." The goal of consumer movements is typically "to change the principles, practices, and policies of organizations, businesses, industries, and governments" (Ibid. 2004, p.691). Emotions are present in every aspect of protest and social movement (Goodwin et al. 2000; Jasper 2011). Indeed, they motivate individuals, are generated in crowds, are expressed rhetorically, and shape the stated and unstated goals of social movements. They can be drivers or consequences, and sometimes these are intertwined (Jasper 2011).

Emotions are central—even essential—to collective consumer protest or activism (Goodwin et al. 2000). Wrath energizes and mobilizes resistance in activism and makes consumers eager to take action (Mackie and Smith 2015). The sense of collectivity is strengthened when group members share a sense of wrath against opponents, which leads this shared anger to influence positive reciprocal emotions, such as affective loyalty among the members.

Anger in protest and activism contexts typically comes in moral forms. It is a "form of righteous indignation, a moral sensibility based on an analysis of injustice as well as a gut feeling of oppression" (Jasper 2011, p.297). Wrath or moral outrage over governmental practices, betrayal, feelings of indignation, and perceived intrusion on one's rights: All of these are related to moral intuitions, felt obligation, rights, and information about expected outcomes (Goodwin et al. 2000, p.79). Hence, in the protest and activism context, wrath or anger belongs to the group of emotions labeled *moral emotions* (Jasper 2011). Injustice frames are essential to protest and depend on "the righteous anger that puts fire in the belly and iron in the soul" (Gamson 1992, p.32). It has been argued that emotions connected to moral sensibilities are particularly strong for motivating action (Goodwin et al. 2000). Seeing emotions as social constructions and judgments of value makes them an integral part of our system

of ethical reasoning, and in our case, wrath or feelings of injustice and the misdeeds of authorities drive the consumers' rhetorics. All levels or groups of actors have their rhetorical strategies, and the overtly angry "non-rational" type might be downplayed by rational, institutionally supported experts (Cass and Walker 2009).

We now move on to our empirical case and discuss the rhetorical strategies of the consumer activists.

EMPIRICAL CASE, MATERIALS, AND ANALYSIS

The wind power park initiative

To explore wrath in consumer activism, we analyze a case in Finland, where opposition to wind power by local consumer citizens has grown strong. First, we briefly describe the political background, in order to provide the bigger picture for the studied case.

According to European Commission Energy (2015), globally recognized agreements such as COP21 and EU2020 have put great pressure on parties to transform energy systems in pursuit of achieving zero emissions. Commitments to reduce emissions translate to national and local levels through legislation and development strategies. The energy sector is undergoing a transition from a fossil fuel-based economy to becoming fossil fuel-free through reliance on new technologies such as solar and wind power or biogas. These technologies vary from the traditional centralized energy production systems, such as coal and nuclear plants, to newer distributed energy systems where production takes place closer to the consumers. The future energy consumer is expected to participate more actively by producing energy and participating in demand-response and energy-saving behaviors, for example by selecting smart houses and sustainable mobility. Consequently, the transition from one sociotechnical system to another requires citizen participation and some level of agreement on how to act in the emerging system. In fact, consumers' active engagement and inclusion in decision-making processes is among the top priorities of the European energy transition.

Finland's goal of reaching 38 percent renewable energy by 2020 puts pressure on decision makers to push forward and encourage consumers to adopt new sustainable technologies. At the beginning of 2011, the Finnish government began a subsidy scheme

for wind power. Consequently, there has been substantial growth in wind power capacity, from 211 facilities (equaling 448 megawatts, or MW) in 2013 to 522 facilities (equaling 1553 MW) in 2016. Finland's 2020 capacity target of 250 MW is expected to be reached in 2018 (Finnish Wind Power Association 2017).

Our case focuses on the time period just discussed: We analyze a wind power park initiative taking place in Finland between the years 2011 and 2016. During this time, resistance to wind power grew in the municipality in question and its surrounding region. Several consumer citizens became actively engaged in opposition activities such as organizing local discussion events, participating actively in media operations, involving politicians, collecting money to enable data collection and research, establishing a network of local and national actors, and connecting with international wind power resistance networks.

Wind power has been actively debated in the Finnish media. In particular, an investigation into the health and environmental effects of wind power, ordered by the Ministry of Economic Affairs and Employment (Ministry of Economic Affairs and Employment 2017), resulted in a call for further research. The investigation was initially requested by the True Finns political party,[1] which played an active role in provoking national debate, not least due to media headlines about bats exploding because of infrasound emitted from the wind power parks (Hartikainen 2016). It could be argued that two countering opinions are to be found in the national debate. The first is the view of wind power as one of the most important, safe, and emission-free Cleantech solutions to combat climate change, support the Finnish export industry, and provide national growth and more workplaces (Finnish Wind Power Association 2017); the second argues that there are still many unsolved problems regarding noise pollution caused by blade rotation, and especially health issues from infrasound. This view also questions the degree to which wind power really contributes to the national economy via economic benefits and more workplaces (Tuulivoima-kansalaisyhdistys 2017). In our analysis, we focus on this opposing side.

Empirical material

The empirical material consists of spoken and written comments, where opponents have expressed themselves freely without any

Table 6.1 List of empirical materials

Type of document	Pages	Year of publication
Transcripts of two local wind power discussion events	35+45	2015–6
Suomi24 web discussion forum (copied to word format)	25	2011–16
Online news items and public comments from regional/national newspapers	20	2011–17
Blog by local opposing activist	19	2017

intervention from the researchers. Data was gathered during two events. Local actors organized the events, which consisted of invited experts talking about the pros and cons of wind power and answering questions from the audience, mostly residents of the region. These events were filmed and are available on YouTube. They were transcribed for further analysis. The chapter also draws from online news items from regional and national newspapers, a blog, and a web discussion started by a local activist (see Table 6.1).

Analysis

To study how consumers use wrath in opposition activism (Cass and Walker 2009), we apply rhetoric analysis. Rhetoric analysis is a form of discourse analysis which, like discourse analysis in general, makes it possible to capture "the multiplicity of possible meanings and the complexities of social practices" (Alvesson and Kärreman 2000, p.147). Thus, discourse analysis provides an analytical perspective to grasp how people manage and communicate their meanings to others (Eskola and Suoranta 2008), which is the main point of interest in this chapter, where the focus is on how activists frame their arguments as a means to resist the development of a wind park and mobilize collective support. Rhetoric analysis focuses on expressions through which one aims at persuading others to accept a particular idea or way of doing things (Hartelius and Browning 2008).

Emotions are always present and/or played upon in rhetorical strategies (Moisander et al. 2016). According to Jasper (1998, p.397), emotions become central when studying protest activities in crowds

and as part of collective behavior. Emotions are "embodied and conveyed in discursive acts" (Perinbanayagam 1991, p.152) and an emotion such as wrath "motivates, organizes, and guides perception, thought, and action" (Izard 1991, p.14). Hence, our analysis focuses on how opponents talk about wind power, and especially how they use language to influence their intended audience.

Rhetoric is particularly well suited to the investigation of wrath in consumer opposition, as it is a form of language used to influence—to have effect on—an actual or implied audience (Sillince et al. 2012). Aristotle describes rhetoric as a theory "concerned with argumentation, justification, and persuasion" (Aristotle 1984). According to Aristotle (1991), there are three ways to appeal to an audience: ethos, pathos, and logos. Ethos appeals to the ethics, pathos to emotion, and logos to the logical or rational. These are different ways of persuading audiences—however, "instead of approaching rhetoric as a deceptive tactic that only elites use" (Hartelius and Browning 2008, p.19), we draw on rhetoric more loosely and characterize it as a stylistic resource, which pertains to communication as long as language is used deliberatively (Hartelius and Browning 2008).

FINDINGS

In this section, we show how wrath, as feelings of injustice, fueled consumer activists' rhetorical strategies employed in resistance of the wind power park project. The findings suggest that activists employed three rhetorical strategies in particular to undermine the project as well as to enroll supporters. In *morality rhetorics*, arguments that appeal to ethos are used, such as questioning the righteousness of the project and the authority of the initiators. *Evidence rhetorics* are underpinned by arguments aiming at undermining the logic of the project by typically referring to a kind of rationality, using facts and figures related to the consequences arising from the wind power park project. In *victimization rhetorics*, activists frame their arguments by appealing to emotions and referring to various kinds of "suffering" and ill-being that the specific targeted wind power park would cause. It should be noted that an argument can rely on all three appeals at once and it is not always clear what is the most decisive aspect of an argument or whether it is more ethical (ethos), rational (logos), or emotional (pathos) in nature.

Morality rhetorics

In our case, morality or ethos (ethikos) rhetorics refer to arguments concerning the morality of the initiators of the wind power park proposal, as well as others who support it. The developers, for example the private companies, the municipality, and the state, are viewed as "intruders" who are invading the neighborhood. Strong expressions of wrath such as swearing, insulting opponents, or using bolded text to highlight one's feelings are typical of morality rhetorics.

"What do they think they are doing?"

In these texts, opponents express wrath in "direct wording," highlighting the culprits and using words to insult and undermine their intentions. In the following passage, the consumer questions the sanity of the planners' decisions, which seem to pay little attention to the perceived negative consequences of the project for the local community.

> Why on earth are they building these things in the middle of a village?? Are the planners out of their minds!? The noise harm is enormous for people living close by and those gadgets are terrible to look at. On that they would destroy skiing and outdoors areas. The [xxx] area is a historical area, NO GIMMICKS THERE, THEY BELONG FAR AWAY TO NON INHABITED AREAS AND ITS SHORES!!!

The opponents particularly raise the conflict between industrial and country settings, and the inherent moral right of a person living in the countryside to escape the industrial environment, which here is said to threaten the "unspoiled" habitat.

> We have voluntarily chosen to live in the countryside, with its dung stacks and smell of shit. We don't need ugly industrial constructions to destroy our recreation areas. They'll take over the whole forests and its roads!

Who's got the power?

The opponents further raise the threat of third parties coming and taking the power from the current negotiators, emphasizing the likelihood of an extant threat becoming reality without any ability to have an influence on the outcome.

> And there are those issues that haven't been told to the ones renting their land (landowners) by the wind power companies, maybe you have noticed

> that contracts usually state that it is ok to move the rights to a third party without informing the landowner . . . That is probably what would happen in our case as well, that the wind power company takes care of the permissions and construction and then sells it to foreign companies. Soon our forests will be dominated by foreigners who have no clue about our everyman's right.

Furthermore, the opponents raise concern regarding the morality of proponents of the scheme, suggesting, through the use of irony, that they may have hidden agendas or interests.

> There is a good side [to] this wind power issue and it is that it shows Finnish corruption which is fantastic [ironically]. So really when discussing if one should be open about personal ties, I've noticed that the ones who are eagerly for wind power are usually the ones benefiting from it economically.

Who can be trusted?

In this category opponents raise ethos rhetorics that concern issues such as who will or who can be held accountable in the case that problems occur later, tying particular negative outcomes to the different actors with strong words such as "destroy" and "leave."

> Well, here [in a document] it says that a place became uninhabitable [because of wind power parks], for sure it is a good project for the municipality and so on, but who is [the] debtor if that happens and people's possessions are tied to the estate? If there is a need to leave? Who pays if one has to go; who do I send the bill to, the municipality or the wind power company?

The evidence rhetorics

In the evidence strategy, consumers express their wrath through questioning the logical basis and argumentation upon which the planned course of action is built. Hence, this category captures logos, which refers to arguments drawing on "facts and figures" or a lack thereof. These arguments draw on "logical evidence" such as data, and *rational argumentation and knowledge* are displayed in the language used. This category is typically technology-oriented, trying to portray, and persuade through, an image of expertise.

Does this make any economic sense?
One logos-based rhetorical tactic employed by the opponents is questioning the project's economic viability, with reference to the positive economic outcome being used to sell the project to the local community.

> And without subsidies wind power doesn't make economic sense, or might at some level but it destroys the market for other energy technologies and the possibilities to invest in them . . . and it has not gained us consumers in any way; on the contrary, we are now paying more electricity tax!

Does this technology work as intended?
The second logos rhetoric concerns arguments against wind power as technology: There is worry regarding the maturity of the technology as well as the size of the windmills. This also includes questioning noise and infrasound-measuring techniques and the scientific studies that have been carried out.

> We are not against renewable energy technology and not wanting to scare people, we just want to talk about the facts that we have found out about wind power technology as they really are.

Opponents expressing themselves in this rhetorical category use a technological form of language to communicate personal expertise and thus give more legitimacy to their concerns.

> Stall regulated windmills were/are about 8–10 dB more silent than the modern 2–3 MW pitch regulated windmills during the same wind speed!! Height matters! The wind has a vertical profile, which means that it blows harder more above and weaker close to ground, especially during evening and night. Adding to this, the noise from a windmill changes in sequences . . . this means that when there is a strong wind we are getting close to the noise of an airplane, from one wind mill alone!

What will happen to the people, animals, and environment?
The third logos rhetoric entails consumers' concerns about a lack of research evidence regarding the eventual consequences of the project, in terms of both health and quality of life. A particular characteristic is the use of expert language.

> In Finland there hasn't been any scientific research about wind power effects on health of livestock. Instead, there are studies from abroad

> and their results are worrisome. I am not doing scientific research, but a mapping of the current situation based on facts. If the mapping shows that infrasound hasn't got any effect on the health of the livestock "that is good so."

Running throughout the logos rhetorics is mistrust of the "official truth" and a search for reliable knowledge and facts. Opponents are active in seeking information and comparing different sources.

> Why do they talk about "noise areas" and the official document (YVA) say unsuitable for recreation activities? What was the reason they had to dismantle windmills because of noise pollution, too old technology? Is there anyone who really knows?

The victimization rhetorics

In the rhetorical tactics building upon pathos, the opponents engage in a discourse of pain, loss, and/or fear, focusing upon sharing and evoking emotions. The opponents share their personal experiences, or recount others' experiences, of health problems and perceived disturbances because of wind power. Examples include people moving from their homes and suffering economic losses, seeing the root of their suffering as coming from wind power facilities. This group includes "reactive" actors who move because of perceived wind power threats; they become active in organizing resistance through local events, media engagement, and fundraising for data collection and research, as well as tapping into national and international networks.

Is this fair?

One pathos rhetoric involves telling tales of people's lives coming to a halt because of the insecurity and perceived threat to their wellbeing. The pathos rhetoric of this being a wrong done to the people ties back into the moral rhetoric in which something is being taken away from people:

> I know that there are many families here who have been planning [on] repairing their house and now all investment plans are on hold because they are waiting to see if the new zoning plan is accepted. These families are planning to move away from here . . . actually some are already moving because adults and children show symptoms, so this is not a joke! I want to live in my home until I'm old but I can't now and this is wrong!

There is a fear of being invaded and a "vision of destruction" of the current landscape and lifestyle:

> NO to that size wind power destroying people's life here! The region has fantastic outdoors, skiing, and trekking possibilities . . . berry picking and mushrooms. People are also horseback riding here and where would they go with their horses, on the side of the highway?

What if this is dangerous and something goes wrong?
This category entails encounters in which the opponents highlight that consumers are powerless because they do not dare to speak out loud. This rhetoric is also highly emotional and presents wrath as a result of personal wrongdoing as well as a fear of losing one's health and home.

> Some people are afraid to talk about things with their own name because personal health issues and fear of losing [their] home or property value [are] in question, says Pekka Saarela [name changed] who also lives as an evacuee.

Personal experiences and feelings are brought to the forefront in this rhetorical strategy.

> Well, I'll give you an inhabitant's view on wind power . . . you can think that the noise and infrasound won't affect you, you can hope and pray . . . And then, the reality after the facilities functioning for 6 months might be something totally different! The question is if you can prove it comes from the wind power facilities; why have I started to wake up in the middle of the night and why are my ears blocked? . . . Why is my blood pressure suddenly soaring?

There is an acknowledgment of the "danger" involved in going out in public to tell your story without legitimate proof of cause and effect, coming to be ridiculed and not taken seriously:

> Here you have all these surrounding issues that affect . . . and it is always said that this is hypochondria and attitude problem—yet I say that no cow thinks if this is good or bad, it just feels the effects . . . Or the half year old baby getting epileptic attacks and when leaving home there are no symptoms disregarding from which direction the wind blows!

DISCUSSION

In this chapter, we explored wrath in terms of consumer oppositional resistance to an initiative to develop a wind power park in a Finnish rural region. Our chapter develops knowledge in the following ways. First, whereas earlier research has typically studied wrath at the individual level, our findings show how it fuels a collectivist movement, thus revealing that wrath is not only driven by self-interest—which would make it sinful—but also reflects a collective, partially other-directed need to shield the community and its members from wrongdoing. Wrath was particularly evident in the movement's taking form as expressed feelings of injustice in terms of the resistance and language used in public debates in newspapers, on online forums, and at local public events. In the case analyzed, the opposition was so strong that the wind power plans were eventually abandoned. Thus, although it has been argued that "anger, outrage, and other aggressive emotions are not always a winning approach" (Jasper 2011, p.296), the results presented by this chapter show that righteous anger and wrath can in fact energize people and help to identify potential wrongdoings before they take place, by questioning power relations, the desirability of the outcome, and who will take eventual responsibility for negative consequences. In this regard the consumer "movement" was successful, giving rise to acknowledgment that more information would be needed in order to make the final decision. Thus, wrath can be seen as a positive emotion energizing and giving direction to collective protest groups.

Second, through a rhetorical lens, we identified three rhetorical strategies driven by feelings of injustice: morality, evidence, and victimization rhetorics. Morality (ethos) rhetoric was found to revolve around questions of justice and power; around who has the right to decide over one's home and who is gaining from this (Avelino 2009). In this rhetoric, the aim was to undermine the authoritarian notion of the project and the people behind the project. Earlier research has acknowledged that being aware of the strong forces of global and local market actors, and their interests as drivers behind local development plans, is of vital importance for communities in development (Barnes 2009), highlighting the important role of this rhetoric type.

In evidence (logos) rhetoric, the consumers sought to understand the consequences, called for facts or reliable research findings, and expressed their concern, suspicion, or distrust toward information

displayed by the wind power park proponents. Consumers used emotionless rhetorics, acting as enlightened citizens aiming at finding the truth. Emotions have often been downplayed in research (see Moisander et al. 2016), and the rational human emphasized. Through evidence rhetoric, consumers questioned the economic, health, and environmental viability of the project, as well as the correctness of the technology used. The importance of such rhetoric is mirrored by the thoughts of Howard (2015, p.145): "Currently, communities must be vigilant to ensure that possibilities of benefit sharing from regional development projects are not lost. Without community awareness and advocacy, projects may not incorporate any benefit sharing strategies beyond regional employment opportunities and income received by individual landholders." Studies have found that protesters are often portrayed as "being too emotional to deal with development proposals in a sufficiently rational manner; being ignorant of the facts; and being overtly selfish in focusing upon private disbenefits, while overlooking important public or collective benefits arising from development" (Devine-Wright 2011, p.61; see also Reusswig et al. 2016). In contrast, our findings show that consumers are able to shield their communities by calling for reliable evidence and questioning the reliability of presented facts (particularly when lacking or distorted).

Although wrath can be found in all three strategies, we found that in victimization (pathos) rhetoric, consumers' arguments seem also to be driven by feelings of grief and fear. Moreover, in our study arguments using this strategy aimed at evoking emotions. Walgrave and Verhulst (2006, p.275) emphasized the importance of emotions and victimization in a new type of social movement, in which consumers may evoke fear related to the personal suffering of others and the need to hinder a harmful future event, or where the victims initiating the social movement themselves. Interestingly, Cass and Walker (2009) looked at how experts (developers and power holders) perceived the individual emotions of local stakeholders in UK wind power projects. Particularly highlighted were (negative) emotions expressed in resistance to proposed development projects, such as hatred, passion, and fever (p.62), and their effect on the so-called rational thinking of individuals. They underline the fine line between what are considered emotional and rational arguments, as perceived by experts, who thus automatically represent the rational side with legitimate measurements and information (Ibid.). The local opposi-

tion, lacking legitimate institutional backup, is easily labeled as a "wrathful" opposition whose rational thinking is blurred by overly strong emotions.

Earlier research has identified consumer opposition in relation to the "not in my backyard" (NIMBY) paradox, which refers to a "good" sustainability project, such as renewable energy power plants, mobilizing highly negative reactions and protest among otherwise sustainability-friendly "green" consumers. Our findings show in particular that the familiar concepts involved in the development of RET (renewable energy technology) projects—NIMBYism and LULUs (locally unwanted land uses), the first of which is widely used to explain local resistance (for example Cass and Walker 2009; Reusswig et al. 2016)—are too simplistic for an understanding of local opposition. The present findings highlight that what we identified as righteous wrath is reflected in questioning the general, not local, viability of the suggested technological solution in economic, health, and environmental terms, and may generate information for wider use in the society.

In terms of managerial implications, we conclude that energy transformation processes can be highly emotional endeavors. To support successful implementation, it is important that the developers understand that they should be prepared to answer to ethos, pathos, and logos rhetorics, and understand that consumer fear often relates to outcome uncertainty and is a natural reaction.

An interesting question for future research regards the individual differences in rhetorical aptitude: Why do some people accept and agree with certain frames (rhetorics) and why do these generate/trigger action? Our chapter approaches emotions as stemming from, as well as being reactions in favor of and against, institutionally (or socioculturally) inscribed roles. Thus, although we focus on the role of individual/collective emotions regarding transformation from one technological system to another, and its concrete outcomes in the form of resistance or acceptance, we also acknowledge the wider marketing system affecting considerations of right and wrong (moral and affective emotions).

NOTE

1. The True Finns party, later the Finns Party, combined left-wing economic policies with conservative social values, sociocultural authoritarianism, and ethnic nationalism. It gained a reputation as a eurosceptic party, presenting strong opinions on such matters as opposing immigration and the marriage of same sex couples.

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Essay II: Exploring Ideological drivers in Municipal Energy Transitions - Network Configurations for Sustainable Energy Innovations

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Abstract

While exploring and developing new solution frameworks for addressing issues related to climate change, inequality, and the current model of economic growth, their interconnectedness is frequently ignored. There have been efforts in recent macromarketing, management and transition studies to uncover these connections, arguing for a more holistic and systemic approach. Energy systems offer a compelling platform for developing such a perspective as energy production and consumption lie at the heart of our sociotechnical systems. We propose that multi-partner networks, conceptualized from the perspective of energy systems, uncover underlying ideologies that imperil change yet in these revelations offer opportunities for sustainability oriented innovation. This paper examines discourses in five Finnish municipalities' energy transition processes to map the focal networks and make sense of ongoing interactions. The study fills a gap in research in networks of exchange by extending the idea of sense making to capture the ideologies that hide in discourses during socio-technical transitions. We identify three types of ideological discourses; "Clan", "Tech-believer" and "Downshifter", and five subject positions constructed by the discourses; "Working-Ant, Realist, Changemaker, Rationalizer and Treehugger". The implications of the ideologies embedded in municipal, multi-partner networks that participate in the energy transition are important as they affect who will be heard in a local context and thus future choices directly related to sustainability outcomes.

Keywords: Renewable Energy, Sustainability Transitions, Macromarketing, Multi-partner Networks, Ideological Discourses, Sense making

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Introduction

From a global perspective, it is expected that by 2050 up to three billion people are likely to join the global middle class (e.g. WBCSD 2009, Dobbs et al. 2011) and in the past 50 years alone, the earth's ecosystem has depleted significantly owing to the current model of growth (e.g. Steffen et al. 2015). If this system of production and consumption continues, the estimated natural resource consumption is expected to rise by three to six times by 2050 (e.g. Assessment 2005). Often, the innumerable problems we face, from ecological crisis to deep social inequalities and political and economic instabilities, are articulated and thought of as disconnected issues. However, there is a reason to believe that these issues are interconnected and rethinking the current model of growth and development is critical in avoiding further environmental degradation and aggravating growing inequalities (e.g. Blok et al. 2015). For instance, there is now enough evidence linking international trade to biodiversity threats in developing countries (Lenzen et al. 2012), species threats from global supply chains (Moran and Kanemoto 2017), and undermining national emission targets (Kanemoto et al. 2014).

According to the International Energy Agency, 2017, the global economy relies on vast energy inputs, 70% of which continue to be fossil fuels. Fossil fuels are one of the main causes of climate change and the challenges involve ways of reducing the fossil fuel related emissions, address issues related to unequal access to energy, resolve environmental degradation, reduce geopolitical tensions related to access to energy and defuse 'vested interests' in maintaining high levels of use of fossil fuels. Energy is often described as 'the ability to do work' (Shove and Walker 2014), but that definition neatly plays into what has been described as the 'physics imperialism' in energy research and policy (Cooper 2017; Castree and Waitt 2017). Physical scientists do understand that energy is embedded in everything around us, and that, it is the fundamental phenomenon underlying the creation of the universe along with gravity. However, physical scientists like to draw a boundary around the energy that humans use to get things done (Stephenson 2017). Therefore, historically, energy systems have been influenced chiefly by technical progress and might continue to do so even in the future, as we try and redesign our energy systems to serve our needs without undue burdens to 'humans and their environment' (Spreng 2017). However, this presents a rather narrow perspective of energy, because many of our social aspirations manifest through opportunities provided by global markets and shaped by economic policies, and these aspirations have profound implications for energy systems (Spreng 2017). Ideologies are immaterial aspirations that both arises from and affects material circumstances (Press et al 2014). In this study, we highlight the importance of understanding underlying 'cultural-cognitive commitments' (Giesler 2008) that may hamper or further the adoption of more sustainable energy innovations in municipal energy system transitions. The way individuals make sense of transition initiatives and draw from their ideological stances to navigate changes, makes it purposeful to approach ideologies as "frameworks of ideas and beliefs" (Haase and Raufflet 2017).

Energy transition is a system-wide ongoing process during which transformative initiatives and actions have the ability to influence people's response to energy. Energy-related behavior is dependent on socio-economic incentive structures as well as political, institutional, and organizational frameworks (Mannberg et al. 2014). Research also shows that strategic orientations are affected by conflicting ideologies (Mees-Buss and Welch 2019; Press et al. 2014) and this dependency has received less attention in the transition literature (Geels 2020). Local level (Dóci et al. 2015) interactions and their resulting views are critical during energy transition policy

making (Coenen et al. 2012) as well as innovation processes (Ringberg et al. 2019). Municipalities, cities and other communities are in a position to further the transition to a more sustainable low carbon and cost effective energy system (Kalkbrenner and Roosen 2016; Sarrica et al. 2016; Steg et al. 2015; Kostevšek et al. 2016). These interactions imply a network of actors (Van Der Schoor 2015; Layton 2011). As municipalities are deemed appropriate micro-units for establishing sustainable energy systems (Burton & Hubacek 2007), our study focuses on multi-partner networks at that level.

The role of sense making for managing complex business networks (Henneberg et al. 2010) and agenda construction for driving radical innovation within the context of emerging business fields (Möller 2010) has been explored within network research. Studies have focused on managing in environments that involve complex interactions between network and knowledge economies, globalization, and technological dynamism (Henneberg et al. 2010, Möller 2010, Möller et al. 2005, Ritter et al. 2004). Network research has identified and articulated the importance of building different types relationships and networks to tackle complex challenges faced by firms (Möller and Rajala 2007). In his article, Möller (2010) draws upon studies using insights from evolutionary economics, sociology of technology, and innovation studies on the evolution of socio-technical regimes. However, Möller et al. (2020) point out that focusing on an economics-driven market view takes away from real-world issues and taking into account the contexts of transition arenas could enhance managerial sense making while infusing it with an understanding of the contemporary environmental context of marketing and business strategy.

From the perspective of transition studies, the process of transformation of energy systems in the last few decades has resulted in coordination of energy-related infrastructures and paving the way for new kinds of network configurations. One such transformation relates to a transition from the current centralized energy systems to more decentralized ones based on renewables (Ruggiero et al. 2015). This transition process is opening up opportunities for studying how actors are engaging with ideas relating to the transformation of local energy systems. Such system-wide transformations offer unique co-evolutionary opportunities for innovation and a stream of academic literature has emerged in an attempt to understand the dynamics and directions of such socio-technical transformations (see Köhler et al. 2019; Sengers et al. 2016). This literature is acknowledged in network studies as well, as discussed above. However, those studies have focused on understanding how managers understand and make sense of opportunities in such complex transition processes.

This paper attempts to turn the focus on how the so-called meso-level actors (e.g. Schenk et al. 2007; Schultz et al 2012) in five municipalities (small rural towns or villages), considered as representatives of their local civic communities, engage with the idea of energy self-sufficiency. More specifically, we define the meso-level actors as local- 'regime' level decision makers, politicians, business people, researchers, innovators, consultants, NGO's, project leaders as well as prosumers (and so -called niche-level actors). These are individuals and groups who have "the means to act", either because of their existing role in a socio-technical system or the possibility and interest in entering such role (prosumers as an example). These actors might either maintain or challenge the current regime and through ideological tensions affect the legitimacy (Press 2014) of energy innovations. By addressing ideological drivers that affect sustainable, renewable energy innovation in municipal energy transitions, the aim of this paper is to create more understanding about ideological tensions within (emerging) municipal transition networks by analyzing locally

produced discourses about renewable energy. This way, uncovering and exploring the connection between ideologies and sense making offers new insights into the network characteristics and capabilities that could then help identify new decentralized, sustainable energy innovations. Understanding how ideologies work within these networks gains importance for developing relevant methodologies and tools for effectively coping with future challenges (Kostevšek et al. 2016) and viable business opportunities such networks (Farla et al. 2012) present. It can be argued that municipalities, as small regional arenas, reflect upon larger national and global 'macro structures', guided by dominant social paradigms (Kilbourne et al. 2012; Press et al 2014). This has implications on what kind of innovation trajectories might be considered relevant in municipal contexts. Following the constructionist logic on studying social phenomena, the focus is upon the specific ways in which, in this case opportunities for locally produced renewable energy, is produced discursively and the subject positions "constructed and given to actors" in the discourses to reveal the ideological constructs at work behind the sense making in local networks of exchange.

Networks research in understanding transition logics

Transitions affected by technological innovations result in several changes across our socio-economic systems related to consumer user practices, regulations, industrial networks (supply, production, distribution), infrastructure, including meaning and culture (Möller 2010; Geels 2002, 2005). Traditionally, from the perspective of business, the transition to renewable energy systems, especially within the context of energy self-sufficient regions, could be loosely framed on Abernathy and Clark's (1985) description of 'architectural innovations'. Architectural innovations result in changes in user dimensions related to relationship with customer base, applications, channels of distribution and service, customer knowledge and the ways of communication, along with technology and product dimensions related to design, production and organisational systems, managerial and technical skills, supplier relations, equipment and related knowledge and experience base. However, when the context narrows down to energy self-sufficient communities, this frame is not enough, as in such transition processes the actor network implicated go beyond the traditional framing of markets as diverse actors are continuously engaging in the transition process through multiple roles. These identities could include being a producer and consumer (prosumer) at the same time, an expert and farmer, entrepreneur or landowner, and other roles that just emerge out of the transition process. Möller et al. (2020) have called for a reframing of traditional mainstream understanding of markets. They propose that in order to capture the reality in terms of the radical transformation of value-creation, the mainstream view that tries to capture firm environments through traditional market lens needs to change and take into account the complexities of value-creating contexts. Thus, in addition to opportunities for studying new network configurations, municipal "arenas' might provide spaces for new business innovations that are uniquely connected to the new, sustainable energy paradigm.

Ideologies and sense making

Adhering to the fact that transitions include aspirations far more complex than the choice of cleaner technology (Spreng 2017; Humphreys and Thompson 2014; Press et al., 2014; Geels 2020), turns the focus towards so-called intangible drivers; mind-sets and belief-systems embedded in transition processes. These are expressed in, and can be explored as ideological discourses. The socio-technical transition literature recognizes the role of discourses in learning and adaptation, as

well as in facilitating or challenging transitions, as they connect directly with policy and institutions (Späth and Rohracher 2010).

Our perspective is that expectations emerging during an energy transition process requires actors to consider the possibility of new social order in contrast to their current reality. For example, municipally organized events such as workshops and meetings present new information, ideas and insights, creating an opportunity to disrupt the prevailing, dominant logic of the regime. The notion of disruption might also be considered from the perspective of innovation outcomes (Ringberg et al. 2019). Research in consumer psychology shows that humans have an innate predisposition to play it safe (Steg et al., 2015), meaning that the more disruptive or unimaginably large the transformation is perceived to be, the more reluctant we are to changes and cling on to our dominant beliefs (Stoknes 2014). The way people make sense of and give meaning to things is rooted in the socio-cultural context they are born and socialized into (Giesler and Veresiu 2014; Humphreys and Thompson 2014). Often, the effects of these inherited belief-systems remain opaque in day-to-day interactions (Kilbourne and Mittelstaedt 2012), as they have become a legitimized part of habits and thus considered part of "reality" (Berger and Luckmann 1967). The underlying assumption is that the reality of everyday life, as observed by an individual, is a social construction (Berger and Luckmann 1967; Moisander 2001; Salignac 2012). Social systems have evolved throughout time, cementing habits of doing things in certain ways as reality and created institutions to maintain and structure the collectively agreed upon belief-system (Giesler 2008). When exploring deeper underlying belief-structures (Mees-Buss and Welch 2019) as ideological constructs (Press et al. 2014), we refer to that many beliefs, habits and thus practices stem from a 'collective subconscious' as they have become 'taken for granted ways of doing things or beliefs considered as objective truth' (Markkula and Moisander 2012; Giesler and Veresiu 2014; Humphreys and Thompson 2014).

Ideologies are, primarily, some kind of ideas and so, belief-systems (Haase and Raufflet 2017). There are also no private, personal ideologies; they are always socially shared beliefs by members of a group regarding social representations defining their identity. This means a shared understanding of fundamental conditions and "*ways of existence and reproduction"* (Van Dijk 2006: 116). We explore the sense making and "enactment" (Weick 1995) of ideology, by seeing it as a forward visioning force (Mees-Buss and Welch 2019) that interacts with culture (Marion 2006). Thus, culture provides history, symbols and meaning to 'what things are and where they come from'. Ideology builds upon collective belief-systems and knowledge structures of 'how things are and why' supporting institutionalized ways of doing things that help avoiding chaos in decision making and action (Haase and Raufflet 2017). Spoken, written or expressed symbolically, language, words and their meanings, is the most powerful tool to either maintain or challenge the social and cultural reality experienced by an individual (Markkula and Moisander 2012).

All discourse is ideologically bounded and grounded (Eagleton 2007), "*we produce, disseminate, and consume ideologies all our lives, whether we are aware of it or not*" (Freeden 2003:1 cited in Press et al., 2014). Discourses can be approached as 'a system of statements which constructs an object' (Salignac 2012) and in choosing so, we explore how structured sets of texts come to function as "reality constructors", which help constitute the social phenomena in question (De

Cock et al. 2005). It is assumed, that ideologies are largely expressed and acquired by discourse, so when group members explain, motivate or legitimate their (group-based) actions, they typically do so in terms of ideological discourse (Van Dijk 2006: 120). Following the constructionist logic on studying social phenomena, the focus is upon the specific ways in which, in this case *local* renewable energy, is produced discursively and the subject positions given in the discourses. The objective is to reveal the ideologies that can drive the ways in which concepts in discourses are linked together (Moisander 2001; Humphreys 2010). Concepts that are present in the 'discursive universe' of talk about renewable energy, will be linked in particular ways by particular actors with their own agendas. By using the concept of "harm" and "technology" as an example, Humphreys (2014: 268) exemplifies how *"one may have an ideology from which the belief that technology causes harm is naturalized, an ideology that one might, from an ethical perspective, label luddite. Another ideology might naturally see that technology is a way of reducing harm to the environment, or what we may call techno-utopian".*

The divide in analysing individual's sense making processes is called analytical dualism (Fairclough 2005). Mees-Buss and Welch (2019) separate the analysis of discourses into what happened at surface level and what transpires from the level of deep structures where narratives are told in retrospective. Our paper focuses on events where actors are envisioning and talking about future action – discourses about what should be done, how and by whom regarding the energy transition in their municipality. In expressing and discussing their perspectives, individuals construct upon earlier experiences and existing knowledge systems, thus also drawing from underlying belief structures (Marion 2006). To reach these deep structures, the why's in the discourses, we followed the expressions of contradictions and conflict (Moisander 2001; Mees-Buss and Welch 2019), to uncover competing ideological structures.

Municipal energy transitions

Transitioning from the carbon -based- energy production to renewable energy systems in municipalities entails a situation where there is an ongoing flow of information between actors on different levels in a multi-level, socio-technical system. Macro-level, e.g. national, policy and governance -actors maintain (or try to disrupt) the legitimized energy system by providing guidelines, rules, research as well as funding opportunities. The macro-level, national energy strategy, has a direct impact on the municipalities as it provides the normative and legislative structures for their actions. A way of introducing energy transition matters into municipal context is by organizing public meetings and workshops. In the cases of this study, local actors were invited to discuss renewable energy and self-sufficiency strategies. These meetings also form a scene for ideological tensions to arise (Press et al 2014). Following the above logic, we consider that municipal, meso-level actors construct their energy reality inside a framework of institutionalized-legal, social, economic, knowledge and belief systems. What is decided upon outside the municipality, by macro-level, national governmental regime actors, EU and Globally (the Paris agreement as an example) needs to be considered and acted upon in the local transition context. As an example of how the ongoing (global) development has changed the traditional roles of producers and consumers in the energy markets, is in the way consumers also become producers of energy, also known as prosumers; agents that both produce and consume electricity (Olkkonen et al., 2017; Parag and Sovacool, 2016).

In addition to exogenous influences, there is another important context affecting municipal energy transitions: The unique geography of natural-, material- (existing technology and production facilities) and knowledge- (education, profession, age and gender) resources available. These are embedded in the local cultural doxa (Bourdieu 1977; Press et al 2014), the dominant paradigm with taken for granted personae, values, symbols and beliefs, a sociocultural belief-system that provides a collective agreement and map on 'how to make use of those' (Kilbourne et al 1997). As collective norms and habits manifest as ideological constructs, uncovering and understanding underlying ideologies in locally emerging networks is crucial for identifying what forms these new energy systems might take. Following this logic, we explore how local actors use their ideological ideas and beliefs (Haase and Raufflet 2017) to make sense and participate in the municipal energy transitions. These connections imply that building an agenda for sustainability transition calls for identifying ideological discourses (Van Dijk 2006), that are produced and either legitimized or non-legitimized by social actors in the local energy network. By conceptualizing ideology as a sense making resource (Mees-Buss and Welch 2019) we open up to the perspective, that sense making mediates between deep structures (ideology) and discourse as a surface expression imbued with ideology (Haase et al., 2009).

Research Process

Context

Because the research interest lies in exploring ideological discourses in regional energy transitions, the main methodology is discourse analysis. This analysis follows the tradition of interpretative structuralism, making a rich description of the context of the research important (Denzin and Lincoln 1998, Salignac 2012).

Finland has set its national goal to become a carbon neutral society by 2035 (ym.fi 2019), entailing a need for rapid decarbonisation especially in the mobility, housing and industry sectors. Finland is a sparsely populated country, with most people living in the southern regions, near the capital area and along the coastline. The small, rural towns and villages have richness in natural resources and traditionally, sustenance comes from farming, forestry as well as local small enterprises. The Finnish rural regions encounter challenges because of declining population and thus loss of (public) services as the younger people are moving to the big cities. Renewable energy innovations, production and services could serve as a revitalizing force in rural Finland.

Municipalities have a central role in the Finnish energy transition, as they are responsible for implementing the national energy and climate strategy and its goals. The data was collected by following the Energy Self-sufficient Regions (ESSR) project led by the Levón Institute at the University of Vaasa in Finland. Five municipalities (both in the role of actors as well as describing the functional and geographical borders of a region) have been involved, those being situated throughout the regions of Ostrobothnia, Central Ostrobothnia and Lapland. The Energy Village concept, developed by the Levón Institute at the University of Vaasa in Finland (Peura 2013, Peura et al. 2018), was initially about creating economic opportunities around energy for actors in village communities near Vaasa. The idea was to keep circulating the economic value within the community. The initial concept expanded to the national ESSR project, with the addition of using deliberative democracy as a way to support more local participation. In the beginning of the ESSR

project, the five municipalities had their energy balances calculated, including official figures for electricity consumption, heat demand and transport fuel, accompanied by the bioenergy potentials and projected wind energy potentials. The energy balances were calculated using a tool that has been developed during the preceding Energy Village project (Peura et al. 2018: 86). The energy balance provides an overview of how much money people in a region are spending in energy related costs each year, and used as a starting point for a SWOT analysis conducted together with local actors. Throughout the three -year's project (2017 – 2019), locals (people living and / or working inside the borders of the municipality, also called municipal actors in this paper) were invited to meetings. On the first occasion, a SWOT analysis was made, and in the next meeting, the results were discussed further. Here, deliberative democracy tools such as the World Cafe method were used to make sure that all participants got their voice heard. The aim of the workshops where the SWOT findings were developed further, was to develop an energy and climate strategy for each municipality, and based upon those visions, create a roadmap for renewable energy production as well as energy efficiency. The idea has been to kick-start the local actors to engage in developing their potential businesses and new projects outside the ESSR.

Data Collection

In exploring ideologies in municipal energy transition dynamics, this this qualitative study relies largely on discourse analysis (Jorgensen and Phillips 2002, Salignac 2012). Focus is upon how municipal stakeholders structure their social schema regarding local (renewable) energy, e.g. "*categories that cognitively represent the major social dimensions of groups, such as their distinguishing properties, membership criteria, typical actions, goals, norms, values, reference groups, and basic resources of interest*" (Van Dijk 2006: 730). The researchers attended and recorded the meetings, so the data also includes notes taken during the events. Thus, there is an ethnographic approach to this study (Ellis 2007), which has further enriched the interpretation of the findings though observation and field notes (marked observations and NT in Table1.). For the discourses to remain natural and without interference, the researchers mostly remained in the role of an observer. In some cases, the researcher participated as facilitator in a workshop but did refrain from leading the discussions into some specific direction. Regarding ethical considerations, the researchers always introduced themselves to the participants at the beginning of the workshops, and we asked for permission to record the events. To assure the anonymity of all participants, we have removed the names of locations and used fictive names in quotes.

The data gathering took place in the five municipalities during workshops and meetings between 2017 and 2018. After having attended, recorded and observed many meetings and gathered a good representation of our cases, we sent the selected recordings for transcription made by a professional service provider. Because this study has its focus upon meso-level actors, we selected the final recordings following the notion of purposeful sampling (Lincoln and Guba 1985) meaning they are from meetings and workshops that were attended by local entrepreneurs, farmers and forest owners, municipal decision makers and politicians as well as local or regional project managers and developers. As the ESSR project has its focus upon boosting new renewable energy businesses in the municipalities, the participants in the meetings and workshops mostly fit the profile. We also made sure that the data represented all five municipalities. The participants were always

invited to the meetings or workshops by the ESSR project, either with help from the local contact person (usually someone working for the municipality) or directly via the local newspapers and Facebook pages. Table 1. gives an overview over the empirical materials.

Table1. List of empirical materials

Municipality	Number of meetings and year(s)	Number of Participants & Gender F/M	Type of Data Recorded&Transcribed: RT, Notes:NT	Pages (Word)
1.Ostrobothnia	1 2017	1F/8M	2017 RT	24
2.Ostrobothnia	2 (a&b)2018	2F/2M&4F/3M	2018a NT: 2018b RT	a7: b20
3.Central Ostrobothnia	2 (c&d)2017 2 (e&f)2018	1F/7M&1F/6M 1F/4M&1F/14M	2017c RT: 2017d RT 2018e NT: 2018f,g,h RT	c48: d41 e6:f25,g30,h26
4.Lapland	1 2017	4M	2017 RT & NT	22: 5
5.Lapland	1 2017	1F/5M	2017 RT & NT	20: 5

Findings and Analysis

To excavate deep ideological structures, we looked for the zones of conflict (Mees-Buss and Welch 2019), where a discourse is questioning or persuading another, either real conflicting idea (the discussion happened in the meeting) or a perceived contractionary ideology (the talk includes the idea of others who might not be present in the meeting) (Moisander 2001; Press et al, 2014). We used NVIVO software to analyze the transcripts and categorize emerging structures. Following the value-laden, lexical expressions that group members share in their talk and the presuppositions they make in explaining cause-and-effect relationships (Van Dijk 1998) implies that, firstly, all the transcriptions were thoroughly read and sentences about 'what, how, who and why' regarding local energy were coded into categories. These categories (Called Nodes in NVIVO) where then arranged according to larger themes (surfacing from the data) such as "economic opportunities comes from local biogas" or "environmental issues are restricting our livelihood". Some wordings could figure under multiple nodes, for example *"Local business opportunities comes from biogas"* would be coded both as biogas, social and economic. After this initial phase, the emerging structures were merged and scrutinized to find convergence and especially look for different logics or constructs, e.g. what kinds of ingredients were accepted into the structure of an ideal storyline about renewable energy (Van Dijk 2006). Following the standard procedures and principles of discourse analysis (Jorgensen and Phillips 2002), three different ideological discourses were identified: The Clan, Tech Believer and Downshifting. As explained in the analysis sector, the discourses were excavated from the texts by merging themes and structures into coherent storylines about the renewable energy reality constructed by different talk (Mees-Buss and Welch 2019).

Ideologies, meta discourses and sensemaking

We found that ideological discourses also create different types of subject positions for the renewable energy transition. These are not real individuals but reflecting distinct positions given to groups of actors in a regime (Markkula and Moisander 2012). A subject position is understood in terms of 'the person' or the individual as a placeholder, a linguistic category and a structure in

formation, which enables positioning an individual within a system of representation (Maguire and Hardy 2009). A person can position either oneself or another in a discourse, mostly unaware of this when doing so (Moisander 2001). The five identified portraits were named *Working Ant, Realist, Changemaker, Rationalizer* and *Treehugger*. These fictive positions give hints of power structures that might exist in the context of the municipal transition arenas. From the perspective of ideology, the question became **"What are the main beliefs of these positions?"** Attention was also given to the "who's" that did not position themselves but were talked about (positioned as the other in discourses produced by municipal actors). This became the Downshifting discourse and the Treehugger subject-position. Next, the ideological discourses and the subject positions are described and discussed in detail. The different ideological discourses and the subject positions they produce are presented in Table 2.

Table 2. Ideological Discourses and the subject positions

Ideological Discourses	**The Clan**	**Tech-believer**	**Downshifting**
Main themes **Logic – sense-making – what creates the rationale for doing something regarding energy** **Core constructs & beliefs** "What is seen as normal?"	Utilitarian, altruistic, traditional, collective to individual Local, bio-based solutions bring local welfare. We need to maintain our traditional system of production but in reasonable scale. We need to slow down the global growth and focus on small scale, national and local production and consumption. Rely on experts to measure the correct things, trust the existing knowledge	Techno-utopian, individualistic New technological solutions and innovations brings local welfare and saves the planet as well. Growth and development has to continue "but we can do it better, smarter and more sustainably" Facts & figures – everything can and should be measured, we can manage and control nature	Nature centered, individual to collective, altruistic Nature is sacred we need to change our perspective towards the "native view". We are part of the ecosystem and need to adapt. A lot need to change in the way we produce and consume products and service. Solutions to tackle climate change and biodiversity loss should drive the transition You cannot measure everything – quality of life is not measurable
Manner of talk **These can be considered both as positive and negative by other** (How the subject position is talked about?)	-"Realistic" -Informal language – talk like locals "dialect" -Reliable and trustworthy -Getting along with others, "do not upset the clan" flirtatious - considering locals	-Passionate and Innovative -Formal language – expert language -Expert and 'high fly' -'Good contact' – outside clan – expanding and developing new -"We spirit" – believe in future opportunities	-Preserving nature -Utopian, un-realistic -Emotional language – expressing worry too emotionally -Does not understand reality -Luddite -Different -radical -Driving for change

Subject Position (SP)	Worker Ant and The Realist	Changemaker and Rationalizer	Treehugger
"The Contradictions" Challenges to energy transition	Too radical or "foreign" ideas threat to local ways of doing Outside rules and regulations problematic but have to be followed City Greens and vegans, luddites, create unnecessary problems!	Slow pace, rigid structures, incremental, conformism are in the way of new innovations Wrong technology, stupid choices (not enough knowledge), lack of facts Too much rules and regulations!	People do not listen, nature is not given a voice Radical system-wide changes are needed – downshifting etc. "Redneck" mentality and not being taken seriously!
Sustainability **Finding: How to trigger these types of actors** "The driver"	Economy- Social – Ecology "Safety comes through…"	Social-Economy-Ecology "Innovation / development comes through…" We are allowed to take these further…	Ecology-Social-Economy "Biodiversity and emission free development is made possible by…" Inclusiveness.
Position in network	The ones maintaining a system - the "doers" Difficult-to-change mind-set and conflict-avoidance Needs time to digest and prove of functionality. "Incremental innovations" Securing local balance – secure – sustaining	The leader or catalysator Lots of knowledge and information that might "get lost" – How to capture into transition processes? Conflict might be needed Mostly still entrenched in the dominant paradigm, hard to break free and make decisions that are radical even if this group has the capacity "New Innovations"	Natures voice – challenger of dominant system The hidden discourse There could be more 'fence sitters' who cannot take this position openly Constant conflict Might be capable of thinking outside the box, The energy cultural "misfits" open for radical innovation. Often lacking the know-how and support from others "Radical Innovations" "Challenger"

The ideological discourses and their subject positions

The Clan Ideological Discourse

"Why are you making this so complicated?" The Clan ideological discourse is constructed upon respect of long lasting, local traditions as well as existing rules and norms – e.g. what is considered as normal in everyday life. To create and maintain municipal well-being, local economic growth is necessary and as the natural resources belong to the people, they can be used by continuing the traditional ways of mining, forestry, fishing, farming and agriculture. *"There is a need to understand local actors, people's needs and wants...the aim is to see the big picture of what could gain the region and not go in technology first". (M3)*

In this discourse, traditional values meets the belief in technological solutions. As there is a contradiction in keeping things as they have always been and achieving changes at the same time, there is a strong belief in technology that has proved its utility. The Clan discourse uses words such as reason, proof and realism as ways to achieve goals. Being cautious and avoiding unnecessary "foolish" risks are virtues, this ideology stands for an 'innate predisposition' to look for incremental innovations that do not disturb the existing system. *"Yes, and if you take that xxxx pilot as a good example, they are using the xxxx as supplier. And the owner told us that indeed, today their biogas production brings more income than the traditional farming."(M9) and "It looks like a good project, but remember there is not enough money in the periphery, the plant is expensive and the entrepreneur alone won't get any money,"(M7)*

The Finnish bio economy agenda provides a supporting rationale for this ideology, as ownership of land and a man's "right" to use its resources lies at the heart of this discourse. There is concern about sustainability issues; slowing down climate change and making the environment cleaner are frequently mentioned and considered as "positive side-effects" of economically rational investments. *"Cutting emissions is one of these side effects we want to achieve with this new business... as well as restoring the natural environment".(M4)*

The Clan ideology resonates with the rational ideology (Mees-Buss and Welch 2019) where emphasis is given to logical thinking, seeing a system (nature) rather as a machine and processes driven by objective decisions. In the Clan discourse, emotions are downplayed and duties highlighted, but at the same time, human, social aspects such as consensus and mutual agreement are mentioned frequently. *"So the main point was to get more projects, new businesses, investments and more jobs for the local people."(M1) and "Local energy investments, your (local peoples) energy bill counts for about 4 300 euros per person per year… You could do a lot more with this money if kept in the local economy."(M2)* Incentives to participate in the local energy transition come from the fact that there is an economic gain. *"There's many of us here today because meat-, milk- and cereal production does not bring enough incomes anymore…" (M6)*

This ideology proposes love of land and its traditions exerting a utilitarian approach, centered around the human right to use the land (in a rational manner). Opportunities in the field of renewable energy are often talked about in connection to the bio-economy strategy. The Worker-Ant discourse expresses trust towards national institutions and their guidelines regarding the use of natural resources. *"Regarding the bio-economy; we have enough raw materials, we know that*

the forests are growing faster now as the climate is warming up… and we are very good at working with wood products, and different metals… obviously, the bio-economy requires these skills".(M5)

Regarding power to act, or responsibility for choices, "big actors", such as government and companies are frequently mentioned as the ones who are responsible for the transition: *"This project cannot change anything, we can suggest these xxxx ways of doing things, but it is not in our hands to change the way things are done here". (M1)*

This ideology can be seen as "the maintaining discourse of the regime", the incumbent mindset, that proposes trust in existing institutional structures and its experts. The national experts are trusted (sometimes reluctantly) to provide the right information about how to use one's resources and make a living. This could also be called the "I told you so" discourse as it draws from the security of adhering to existing moral codes and norms, e.g. what is considered normal in a regime.

Portrait of the Worker Ant

"Rather incremental changes please"! I grew up and lived in the countryside for most of my life and definitely know "how to get my hands dirty"; working on the farm or in the forest and fields. For me, a typical Finnish person from the countryside is a hardworking, no-nonsense type, with practical skills and a rational mindset. To be able to make a living in the rural regions in the future, it is clear that we need stable economic growth through rational and sustainable use of our naturally available energy resources. In Finland we have trustworthy research and policy for how to maintain and take care of our natural resources. The control system is one of the strictest in the world, and that gives us a lot of paperwork! The main reason why we should invest in renewable energy is to get more business and jobs for local people and maintain our regional welfare. We know how to take care of our natural resources such as the forest, fields and animals as most of us come from families that have lived in this place for generations. Obviously, we follow the technological advances regarding machines and infrastructure, as well as legislation, but to be honest, I feel there is a common sense to "how to work with our land". I mean, why would anyone want to destroy his or her own heritage and home? For me the trouble comes from these outside people, those that make decisions in the cities, not knowing anything about the reality in the rural areas. Now we all know climate change is a big problem, and we should do our best to become more responsible, but it should not be done at the cost of people and their needs! The new technologies such as solar power and wind still have their problems, especially here in north, and it is hard to find reliable information about new innovations and how they would gain local entrepreneurs. It is obvious that we should have the right to use our own farms, forests and fields to produce biomass such as wood, peat, straw and manure. There is plenty of raw material and it grows back quickly, especially now as the climate is warming up. As they say, "it is wiser to look first than regret later".

Portrait of the Follower or Realist

"What's in it for me?" I am involved in local business and production activities and make my living out of it. Livelihood in the rural areas is challenging as legislation and expectations change all the time and the work itself is often physically demanding. I am my own "boss" and that gives me a lot of responsibility as well. The reason for me to get involved in renewable energy is purely

economic, I need to know how I can benefit before entering anything. New technological solutions and production systems all sound fancy but in the end you need to know if they work, that is why I rather wait and see. Cooperation with others from my area is probably a good idea but we need clear rules, it's strictly business and no hippie ideologies. I can join a (biogas) plant group, but that said, I'm in quite a few groups and a bit fed up with the system, there really needs to be pretty clear rules. And, I will participate only, and really, just for the money!"(M7). The way government changes and the "big city red-greens" shout out their treehugger – socialist ideas, it seems one ought to start eating grass and living in hippie-collectives. We have enough restrictions and controls as it is and the amount of reporting I'm expected to do makes me question the sanity of this lifestyle. We have been working our land for generations and know how to take care of it, all this hysteria about climate change and biodiversity loss has gotten out of hands and we need some reasonable decision makers to put this country into a healthy growth path again.

The Tech-Believer Ideological Discourse

Modern, smart technology to use the biological resources sustainably will bring positive change. This ideology exerts a strong belief in that modern technological solutions or technology will save the world (Humphreys 2014) making it possible to meet bio-economy goals and at the same time save the natural environment (planet). This ideological discourse uses words like smart, innovation, new possibilities and radical changes when talking about future opportunities for the municipalities. *"... Here, in my opinion, the big thing is that the entire energy sector seems to be in transition. And these new operational models are coming in any case, and the one who grabs this opportunity and starts doing new things, will have a competitive advantage that might turn out as pretty significant one…"(M10)*

Opportunities are considered as based upon the natural resources: Forests, minerals, rivers and soil are all resources that can and should be used, in a modern and sustainable manner. In the Tech-believer ideology the responsible utilization of natural resources is the next step in the energy transition, new technological solutions enables extracting multiple value without causing unnecessary harm: Forest based biomass can be processed into high value products and minerals can be mined without environmental pollution. All this thanks to advanced technological solutions and rigorous control by experts. For this discourse it is important to avoid being accused of irrational green thinking or so called luddite traits (Humphreys 2014), even if their underlying values might be in that direction. The best way to avoid accusations of too much "green ideology" is to highlight the economic benefits of sustainable approaches. *"The state of fields should be considered, you might want to leave the straw on the land as it leads to better soil… The same goes for stubs, they should be left in the forests… Many opportunities to make money here!"(M16)*

This Tech-believer ideology wants to combine the best of two worlds, nature and technology in a way that promises social well-being for all people. It also acknowledges different aspirations that might exist in the local context, indicating that there might exist more altruistic motives to why action is required. *"Not everyone will just calculate euros, they want to act because of personal principles and environmental reasons."(M11)*

This Tech-believer ideology builds upon strong beliefs in scientific knowledge, and the contribution of innovations for building new, better (and resilient) societies. There is definitely a place for and a need of radical innovations and this discourse can propose a re-making of existing energy systems. *"Well, as I looked at these (statistics) for the first time today, I got the feeling that there is a lack of market actors (in bio-energy sector), and we have businesses and other actors who might want to join this… but the other part is somewhere else, good networks, collaboration… and we are good at collaboration… so there might be a need for new models of financing that we would come up with, our own models". (M12)*

As technology evolves so will humans, the choices of energy sources and technological systems as well as their business logics are considered of being in transition. New solutions are emerging. Central to the Tech-believer ideology is the belief that technological solutions, such as AI (Artificial Intelligence) and smart systems are entering our lives in anyway and that is the next step for humans, a fact. The radical and passionate, no-risk-no-fun approach makes this ideological discourse closer to the normative ideology (Mees-Buss and Welch 2019) by attributing greater importance to contributing something meaningful and making a difference to the world. This discourse also mirrors the findings by Von Koskull et al., (2018: 123) of the evidence rhetoric "*where arguments draw on "logical evidence" such as data, and rational argumentation and knowledge are displayed in the language used. This category is typically technology-oriented, trying to portray, and persuade through, an image of expertise".*

Portrait of the Changemaker

"Sometimes radical changes are needed!" For me it is clear that we are entering a new era in human development and it is driven by technology! I find it is necessary to spark discussions and get people to voice their opinions. In the end, we all want the same, sustainable growth and well-being for everyone, and as I see it, there is no turning back, we need to be bold and fast in adopting new innovations. The world is a global marketplace and there is a possibility to benefit from being among the forerunners, that's how competition works, either you are in the winning team or you are left with the scraps. Climate change is upon us and the time to act is now, there is so much business potential in being among the first adaptors that is the way forward to have a thriving economy and welfare society. This region needs to reinvent itself and be brave in grasping new opportunities, it makes me so frustrated when people stay stuck in these old, limiting ideas about what can be done in the rural areas. Calculating everything in economic terms and according to "how things have been" won't help us in the coming years, we need to understand the ecological and social impacts of climate change on our region. I follow the "newest" research and global trends and try to make use of it in my work, always on the look out for new solutions and obviously talking about progress tools to others. The world is becoming more "glocal", and that means we need to collaborate and network outside our little circles. I have been involved in many national projects and worked in the industry in a big city, rural life and coming back to my roots makes me want to stay and develop my region into a zero emission thriving energy system. I am experimenting with solar panels and geothermal energy in my private household and own shares in green funds focusing on sustainable technology. Altogether I see it as my individual

responsibility to be the change I want to see in the world. That is easier in a bigger city context but requires more effort here in the countryside.

Portrait of the Rationalizer

"Show me the facts and figures"! I have been following the energy development for quite a while now and I think what has happened with this so called energy transition is that we don't have the right people making choices and we lack real experts. You do not always know which calculations to believe in and there are so many false claims or mere assumptions driving decisions. It is proven that climate change is a fact as well as biodiversity loss, and we need to make large-scale changes in a short time period. Now this fact is real, but what to do about it seems to be the problem! Personally, I am very cautious about technological "fads" and carefully look for reliable information before making my mind. I think that is the problem with all those "flower hat ladies", they believe in anything that sounds nice and sustainable, such as the electric vehicles, not much discussion about the problems with batteries and their polluting raw materials. In my opinion, it is better to wait and see (until the technology is developed) than to jump into something as polluting as its earlier version. On the other hand, waiting for too long is as bad, so it all depends…

The Rationalizer takes personal responsibility for either arguing for changes, or defending the existing system. This is done by criticizing, comparing and analyzing examples (or pilots) and existing research and other official data. This position differs from the Worker Ant and the Changemaker in that it presents a very personal opinion and information package, leaving the audience to make up their own mind. This position works hard to maintain a rational and objective appearance, but interestingly, there seems to be strong value orientations lying beneath the surface which makes it fall into a slightly more passionate and normative direction (Mees-Buss and Welch 2019).

The Downshifting Ideological Discourse

The Downshifting ideology connects with values that are often referred to as altruistic or native, the human being seen as part of a bigger, natural order and not its owner. The nature has its limits that should be respected and maintained (Thompson 2004). It proposes collective and inclusive action, where the value comes from social and ecological well-being and the economic gains are means to maintain a balanced system. This ideology has a more "feminine" or softer approach to how we should solve renewable energy challenges. As the eco-ideology includes "softer" vocabulary such as nurture, care, consideration, well-being, it might also be used as a disguise to safely express ideas and values that are not considered legitimate in current system. E.g. talking about the other who has some weird ideas but might make a good point about xxxx. Interestingly, in the energy village context the actorship in Downshifting ideology is often given to the "Southerners" which refers to the people in the capital area. *It seems that biogas is a future fuel, in the south they already use gas fueled cars in the cities" (M17).*

The Downshifting ideological discourse calls for collaboration and diversity in decision making as well as avoiding unnecessary hierarchies. As it contests the dominant logic of (market) competition it easily evokes the fears for green-red coalitions and "hippie" ideologies which have traditionally been connected to organic farming and luddities of all kind (Press et al., 2014,

Humphreys 2014). Environmental protection and a green orientation are perceived as a challenge as they produce an ideological stance that questions the way land and natural resources can be used. Thus, it opposes the legitimacy if the current dominant and legitimized system (Press et al., 2014). *"And then (as a challenge to local energy development), as you can see with RED II (EU Renewable Energy Directive) and the way it directs policy, European environmental protection and green values have a strong impact"(M18)*

Expressions of the eco ideology are strongest when it comes to discussions about climate change and its impact on the livelihood in the municipalities. *"I was wondering about the image of renewable energy, is it taken seriously or is it thought about as "nonsense… I think it is evolving all the time and now people talk about changes in the environment a lot, we've had quite a few grey Christmases…"(M 19 & M 20)*

Technology is also used as an entry point to express green values as it provides a "neutral space" in the discussions. *"My interest is generally in renewable energy, I have considered buying that solar power system (PV) and otherwise as well… I want more information about other options, biogas would be interesting for the car and so on" (M 21)*

The Downshifting ideological discourse is constructed as the weak discourse in the municipal energy transition context, it is as a third force that it is referred to, mostly as an opposing force, by the other discourses. This ideology might draw from both rational and normative stances (Mees-Buss and Welch 2019) but has ecological values at its core, which is in line with the "*nature is sacred ideology where ecosystems have a value of their own and nature should be protected from extractivism and technology*" (Humphreys 2014).

Portrait of the Treehugger

"We need to respect earth's boundaries!" I think the biggest problem with people is that our values are tied to money and material. We have no real respect for nature and animals, it's all just there for our taking, we own it. My perspective is that we are part of that living system, not above it, and we should learn how to co-exist with nature. I try to be as responsible as possible in my own choices by using "green" electricity, eat locally and ecologically produced food, walk and take the bike or bus whenever possible and voting for ecologically and socially aware candidates and solutions. I am also considering renewable technology in my living and mobility. Still, it does not seem enough, my choices are limited by the offerings and institutional structures of where I live. To me, the way energy and renewables are talked about seems to be repeating the old pattern of domination where we rely on experts who maintain the traditional ways of doing things. In my region, we do not even discuss any other solutions than forest and agriculture based biomass and hydropower, oh, and let's not forget about the ever ongoing "peat-is-sustainable" story. How are we ever going to take a step towards emission free solutions if we only listen to the "Didn't I tell you so" and the "the only thing that is feasible" people? I do think that we need to be cautious regarding new innovations, and especially learn from earlier mistakes as new technology might be as polluting as older solutions, but we should be much faster in adopting the ones that work! Sustainability will only happen if radical, systems transformations are made, that have actual measurable impact on the environment, until that it is only a suitable word used to cover up

business as usual. I am often accused to be too emotional, talking about trees and animals as if they have feelings or getting upset about normalized actions such as industrial farming or logging forests. In a way, it is amusing to hear how some people see themselves as "normal" and find they can tell me how I should think or feel to become more like them. There must be another way of life where we can live in harmony with the nature, and also with fellow humans.

This subject position is usually given nicknames such as the "flower hat aunt" or Eco-hippie by other positions. The treehugger is portraying someone who wants to shift the traditional system toward a downshifting, eco-society where nature has its own value. The traditional roles and power structures are not seen as providing society with tools to make a sustainable transition. This discourse is also talked about as too emotional, irrational and misinformed. These people let their heart get in the way of their mind. Emotions are often downplayed in research (see Moisander et al. 2016), and the rational human is emphasized (Von Koskull et al. 2018). It is often used as a form of domination or belittling an opponent, proving that the counterpart has not been able to think clearly.

Discussion

From the initial data collecting process point of view, we noticed that most gatherings followed the same pattern, where almost all participants are 45+ old men (see Table 1.). However, there were some differences between the five municipalities with one, where half of the participants are 45+ women. This lack of diversity might have some interesting implications regarding dominant ideologies and what kind of discourses are socially acceptable in the local contexts. Especially the missing, Downshifting ideological discourse is driven by values that are traditionally considered as more soft or feminine.

The Finnish energy transition outside the southern part of the country, and especially the capital area, leans towards the bio-economy agenda. Forest sector (and its by-products) appear to be high on the top of the agenda as far as the solution for the Finnish renewable energy transition is concerned. Wind power is not considered a local (business) opportunity, given the complexity and capital intensity; it is seen as an option that should be considered only for by big national or international companies. Simultaneously, the dominant agenda of existing (and new) nuclear power plants and the related agenda seem to be pushing the urgency related to climate change issues into the background, ironically indicating to local energy producers that such these issues are too big to be managed by locally energy producers. In fact, this reveals a top-down decision-making approach, yet the climate objective is clearly to devolve the processes to regional levels.

Most municipal renewable energy related activities seem to be connected to bio-based production (and thus the bio-economy agenda). This means the involvement of authorities such as the Finnish Food Authority and the Centres for Economic Development, Transport and the Environment (the so-called ELY Centres) who are responsible for the regional implementation and development tasks assigned by the central government. The closeness to institutional requirements, normative and legislative frameworks, become tangible in the way the different subject-positions, especially the Worker-Ant and Follower talk about (challenges) of participating in the energy transition.

As the purpose of the ESSR (Energy Self-sufficient Regions) project is to support more locally produced renewable energy, and all the participating regions and municipalities are rich in forest resources and agricultural production, bio-resources are easily given the upper hand. This focus might create certain kinds of technological (path) lock-ins from the very beginning. Especially as the leading ideological discourses in these municipalities seem to lean towards the Clan, techno - utilitarian way of doing things. From the perspective of sustainability transitions, the Finnish "forest is our green gold" ideology is tightly interwoven into the dominant ideological landscape of the rural Finland. It thus becomes clear that local actors want to maintain their rights to use their biggest asset. On the other hand, Finland has received global and EU-level criticism for unsustainable national guidelines regarding use of forests. Taking into account the traditional and utilitarian tones of the dominant discourses and positions found in the municipal energy contexts, correct governmental guidelines are important to maintain sustainability.

Considering the power of ideological discourses at the local level, the intangible but real discursive forces that have the power to either legitimize or downplay local actors ideas and aspirations, the managers of transition processes need to become aware of these. Especially as we have learned that in one local energy network there might exist different ideologies, logics, hierarchies as well as forbidden positions.

Conclusions

Our paper takes a social-constructionist perspective on sustainability transitions in local-level, municipal context. By exploring ideologies, it reveals underlying socio-cultural structures that are place bound, culturally inscribed and do their work at the level of mindset and belief-systems, thus affecting energy innovation and socio-technical transition pathway dynamics. Understanding underlying intangible drivers in local settings has important implications for policy as it points out how there are built in biases or defaults in all local settings, that make certain mindsets and perspectives accepted, at the same time as they ignore other perspectives. Taken for granted truths vs. non-legitimized perspectives. A window of transition opportunity opens in the moment when a change agent enters the municipal arena, as in our case due to the energy village project. Thus, as transition management research (Avelino and Wittmayer 2016) shows, the key project actors enter the local space with their own ideological set-up and the unfolding of the local development. In other words, transitions at local level are strongly affected by a small group of individuals in key roles. Wanting radical innovations that make regions take leaps towards more sustainable systems creates pressure on the transition managers and how far they are prepared to go in putting pressure and challenging the incumbents.

Entering a traditional context where institutional belief systems have been fixed for long, such as the rural areas (with a highly utilitarian ideology) does initially pave way for certain, mostly incremental innovations whilst the more radical ones gain no interest as they are not founded in the local world view and its logic. We need to highlight that such initially not wanted social or technological innovations create resistance and puts the change agent into a demanding position. With the expectation that local transition is a democratic process, local people are asked to join and vote for solutions, still as our results show, the underlying social hierarchies affect who will be active in such collective occasions e.g. workshops and meetings. It might be that the accelerators

are left alone in their efforts of transformation work if they fail to convince the tech-believer and/or include the Downshifter minded. Questions for transition managers are: How to be clear about how big changes we really need to achieve and how to support the change agents who have the hands on task to engage the local actors? As our findings indicate, ideological structures have the power to create material outcomes, by understanding the mental-map of an energy arena, a transition manager has the opportunity to choose tools and avoid biases that might hamper sustainability outcomes.

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Essay III: Market Shaping Energy Myths

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Abstract

This essay views institutionalization as a process where actors are considered as carriers of institutions expressed through language. It takes a micro to macro perspective on path dependency as mental models that might result in and maintain institutional rigidity instead of driving institutional change. This is done by exploring the process of institutionalization as translation by analyzing myths circulating the Finnish energy marketing system. It analyzes how individual actors' discourses construct a collective field of myths tied to the Finnish energy transition and how in these envisioned worlds, sustainability roles and responsibilities are divided. Energy market actors can be seen as drawing from a collective cultural toolkit– rhetorical and symbolic resources that social actors use and interpret dynamically. So called rational myths bridge the individual discourses to collective discourses e.g. dominant Energy Myths which also tell us about different energy realities and how they are structured. The dominant myths that were found are the Energy Dragon Myth, Domesticated Energy Myth and Global Energy Myth. These dominant myths maintain several ideologically imbued rational energy myths, namely the Rock solid, Big brother, Smart & Flexible, Rural resilience and Global village.

Key words: Energy Myths, Sustainability transitions, Path dependency, Mental models, Institutional work, Dominant social paradigm

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1. Introduction

"One of humanity's greatest, present threats is the belief that real sufficient climate action is being taken, that things are being taken care of – when in fact they're not. Not at all. The time for 'little steps in the right direction' is long gone and yet this is – at best – exactly what our leaders are trying to achieve. They are literally stealing our future right in front of our eyes". (Thunberg 2020)

Climate change represents a complex, systems-level sustainability challenge for humanity. There is a collective call for rapid, far-reaching and unprecedented changes in all aspects of society which entails fundamental changes in people's, business and governmental practices (Berg 2019). Central in solving these issues is the globally ongoing energy transition, away from fossil fuels towards clean, sustainable energy sources and technologies (Araújo 2014). Still, this transition towards zero emission societies is not fast enough according to recent reports (Rockström 2017, IPCC 2018) and it is shown that the existence of strong, socio-technical path dependencies slows down the pace of energy transition too much to be able to solve the sustainability challenges (Unruh 2000, Sung and Park 2018). The embeddedness of established technologies into user practices, business models, value chains, regulations, and institutional as well as political structures have created a situation where changes seem rather incremental than radical (Markard et al, 2012, Brown et al, 2013). Also, to avoid future unsustainable path dependencies, more understanding on the emergence, take off and acceleration of "dirty" innovations is called for (Antal et al, 2020).

Recent research suggests that governments and markets are the strongest promoters of transition to renewable energy (Sung and Park 2018, Ottoson et al, 2020). Reflexive modes of governance and planning processes are called for (Loorbach 2010, Smith and Stirling 2010, Bjørnvold et al, 2020) to transform unsustainable socio-technical (energy) systems to more sustainable. There is also critique towards how sustainability is incorporated into decision making in both private and public sectors (Mittelstadet et al, 2014) by corporate and company managers (Gollnhofer 2017, Yngfalk 2019) as well as policymakers and governmental actors (Avelino 2017, Brown et al, 2013, Roberts et al, 2018, Stirling 2014). It seems that, despite sustainability being noticed as a top priority in macro-level public discourses, social and ecological aspects of sustainability are not considered as goals themselves (Scott et al, 2014, McDonagh 2017). Instead, they are means to reach more traditional goals, those being mainly economic factors such as profitability, company growth, ownership value and turnover (Bergman et al, 2016, Humphreys 2014). As planning processes are included in traditional managerial and governance patterns, which again are embedded in the legitimate institutional structures of the regime (Geels 2010, Fuenfschilling and Truffer 2016), their orientation towards sustainability easily becomes superseded by dominant discourses about economic growth and competitiveness (Scrase and Smith 2009, Späth and Rohracher 2010).

It is suggested that the dominant institutional structures, embedded in the social paradigm (DSP) of western societies (Kilbourne and Mittelstaedt 2012) might inherently work against sustainability, because of the core beliefs and expectations being tied to the neoliberal growth imperative (Varey 2012, Wooliscroft and Ganglmair-Wooliscroft 2018). Marketing research, drawing from the field of new political economy (NPE) recognizes the importance of understanding the changing patterns of economic and political structures and the evolution of the

institutional structures. A central notion to taking this kind of critical approach to sustainability, is that consumption cannot be viewed in separation from production (McDonagh 2017). This means including the analysis of non-economic conditions for understanding economies and economic change (Polanyi 1944 and Sayer 1995 in Fairclough 2007: 28).

Lately, institutional work has been used as an approach to understand how actors purposively use the institutional constructs of an organization to either maintain or challenge the prevailing marketplace system (Yngfalk 2019, Moisander et al, 2016, Lawrence and Suddaby 2006), shaping sustainable markets (Ottoson et al, 2020) as well as in the reshaping of socio-technical regimes (Fuenfschilling and Truffer 2014, Fuenfshilling and Truffer 2016). So called market shaping activities (Baker et al, 2018: 4) refers to the interplay of evolving shared understandings, ideologies and belief systems of social collectives at the macro level and the adoption of new practices, expectations and behaviors at the micro level. As energy transitions are shaped by their sociopolitical context (Tarasova 2018), where macro level actors such as governmental, corporations and scientists, play a key role, the power of collective meaning systems that affect the decisions and actions of various actors (Haase et al, 2009) becomes of interest. This is also in line with what Layton and Duffy (2018) refer to as the social mechanisms that lie behind the 'workings of the invisible hand' e.g. intangible socio-cognitive drivers of the market, suggesting that path dependence and lock-in's, underlying institutional rigidness, have their origins in the bounded rationality of human decision processes.

Following above mentioned (transition) logic(s) of viewing institutionalization as a process where actors are carriers of institutions (Zilber 2002), this paper takes a micro to macro view on path dependence and lock-ins as mental models that result in (and maintain) institutional rigidity (instead of driving institutional change) (Haase et al, 2009). It examines how individual action is oriented towards the behavior of others, legitimizing certain mental models over competing ones (Lawrence et al, 2013). This is done by exploring the process of institutionalization as translation (Zilber 2006) through analyzing myths circulating the Finnish energy marketing system. It analyzes how individual discourses construct the collective discursive field of the Finnish energy transition and how in these envisioned worlds, sustainability roles and responsibilities are divided. Energy market actors can be seen as drawing from a collective cultural "toolkit"– rhetorical and symbolic resources that social actors use and interpret dynamically (Swidler 1986, Zilber 2006). So called rational myths bridge the individual discourses to collective discourses e.g. Dominant Energy Myths which tell us about different energy realities and how they are structured.

The aim of this paper is to deepen our understanding upon how key actors in the Finnish energy market construct and reproduce their energy reality e.g. the myths they tell. In this paper, the discourses are produced by macro-level, governmental actors; people in 'powerful roles' associated with states, governments, public agencies, politicians, policy-makers, bureaucrats, local governments and sub-governmental organizations. We also include high-level industry and economic leaders as they are seen to be actively participating in shaping the Finnish energy market (as decision makers, advisors and opinion leaders). The data consist of transcriptions from the recordings of nationally important seminars where Finland's (renewable) energy transition was discussed about during 2014-2018. This has been the time period when the Finnish energy transition has been gaining momentum and the general public discourses have been colorful and multifaceted.

The analysis uncovers that rational myths circulating in the Finnish system are mainly constructed around three dominant energy myths. The *"centralization myth - The Energy Dragon Myth"* where governance-level experts are given a central role in normalizing, maintaining and also 'safely' transforming the energy system. This dominant discourse is challenged by a *"decentralization myth – Domesticated Energy Myth"*, where a shared responsibility between actors from different levels of a socio-technical system , e.g. consumers, prosumers, businesses and governance is seen as the way forward in furthering the energy transition. The Domesticated energy myth also includes perspectives that are opposing the idea that there is a need for sustainability (the rural resilience – rational myth). The third dominant myth – *The Global Energy Myth* could be considered a convergence of the two earlier collective mindsets, it approaches national challenges and their solutions as global goals. Although the three dominant myths separate in ideologies and mental models, they all seem to share a neoliberal path dependence, tied to materialism, competition and growth. Thus, the collective mental models do not differ in their core assumptions which are tied to the same institutions; the political, economic and technological (Kilbourne et al, 1997), they just differ in how to relate to those. From a mental lock-in and (un-)sustainability path dependence perspective this shows that more focus upon intangible, taken for granted institutionalized belief-structures is needed to enable clean transition.

2. Theoretical positioning:

2.1 (Un-) sustainability in energy transitions and path dependence

"*There is no single story about the future of global energy; policies will determine where we go from here – more than ever, energy decision makers need to take a hard, evidence-based look at where they stand and the implications of the choices they make*" (IEA 2019).

The historic climate accord COP21 – the Paris Agreement 2015 – builds upon the UN convention. It has been the first time all nations have agreed to a global climate effort in keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels, and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius (UN 2015). Currently, emission trends are not on track to meet that goal (IPCC 2018). Under current and planned policies, 'the business as usual', the world would exhaust its energy-related carbon budget (CO_2) in under 20 years to keep the global temperate rise to well below 2^{o} C (with 66% probability), while fossil fuels such as oil, natural gas and coal would continue to dominate the global energy mix for decades to come. To meet the below 2^{o}C goal, immediate action will be crucial (IRENA 2018).

The grand energy shift is not only about cutting greenhouse gases and combatting climate change, but it is connected with other sustainability challenges such as loss of biodiversity (UN 2020), overconsumption, security and poverty (EOD 2020). Sustainability as concept is a complex construct built upon the three pillars; social, ecological and economic which should be in a balance. "*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own need*", is the original definition introduced by the Brundtland commission in 1987. Altogether sustainability should be the core, the bottom-line in basically everything we do as humans, and it is more a question of incorporating the understanding and thinking into ongoing processes (Berg 2019).

Transforming the current fossil dominated systems into sustainable, renewable energy systems is challenging, as literally all socio-economic processes depend on the current ones and there are many different interests at stake (Negro et al, 2012, Schreuer et al, 2012). Research on barriers to diffusion and adoption of renewable energy identifies key macro and meso levels, systemic challenges: Lack of stable institutions (Negro et al 2012), stable long term energy planning (Eleftheariadis and Anagnostopolou 2015), cohesive and integrated policy (Michalena and Hills 2102) and cost barriers (Painuly 2001). These barriers are connected both to the institutional (Humphreys and Thompson 2014) and sociopolitical (Tarasova 2018) structures of their context. Accordingly, they form a part of the dynamic-path dependence in energy systems (Sung and Park 2018).

Government and governmental agencies are in a key position to enable the change by initiating and guiding policies and providing collective strategic direction for socio-technical change (Sung and Song 2013). Transition research looks at coordination challenges in policy and governance (Kivimaa et al, 2019, Markard et al, 2020) – calling for reflectivity and flexible modes of governance (Bjørnvold et al, 2020). Sustainability transitions are considered fundamental changes in socio-technical systems such as energy, food or transport that aim to address grand challenges in a way that meets the needs of the present without compromising the ability of future generations to meet their own needs (Markard et al, 2012). In the field of sustainability transitions, the approach has traditionally been from a 'meso-level of systems' (Geels 2020, Köhler et al, 2019). Focus has been upon the diffusion of technological innovations and new infrastructures for the achievement of the sustainability goals (SDGs) with the inertia and the dynamics of radical innovations at its core (Geels 2011 and Thacker et al, 2019 in Markard et al, 2020: 1).

Traditionally, companies communicate their sustainability aspirations in reports such as Corporate Social Responsibility (CSR), Global Reporting Initiative (GRI) or socially responsible investing (SRI). On the other hand, the notions of "green painting and white washing" are used to target the gap between what companies say and what they really end up doing regarding sustainability outcomes (Humphreys 2014, Yngfalk 2019). Accordingly, Bergman et al, (2016) in their study of 9 Finnish Cleantech companies, showed that it is mainly the economic-related factors such as profitability, company growth, ownership value and turnover that are seen as key drivers in decisions regarding energy technology. The social and ecological aspects of sustainability are not considered as goals themselves, but as means to reach more traditional goals, which again are the ones measured by decision makers when viewing results. The production consumption dilemma (McDonagh 2017), refers to that as companies need continued growth, they need customers, and it is merely the output (service or product) which is somehow more sustainable but the way it is consumed will not change. Thus, to enable sustainability, the consumption part needs to adjust as well.

Lately, Antal et al, (2020) are calling for transition scholarship to focus on unsustainable trends to help curtail harmful socio-technological changes before they become entrenched. This is an important perspective, as the "dangers of the DSP as path dependence" might lead to (radical) innovations causing new types of sustainability challenges. One current example from the field of energy technology is the growing need for rare-minerals, such as cobalt, used in lithium-ion batteries of electric vehicles. In marketing research, sustainability has received a fair amount of attention during the last thirty years (Martin and Schouten 2014, McDonagh and Prothero 2014, McDonagh 2017, Yngfalk 2019) and the role of marketing could be considered

central in legitimizing it in the marketplace (Humphreys 2014, Layton 2009, Varey 2013). Sustainability has indeed been suggested as a new megatrend (Prothero et al 2011, Mittelstaedt et al, 2014, Varey 2013) as it has reached a momentum in permeating all levels of contemporary society.

Still, disregarding the global sustainability discourse or environmental discourse (Dryzek 1997), sustainability initiatives seem to lack long term effectiveness or efficiency and most people end up continuing their usual unsustainable habits (Holt 2012, McDonald et al, 2012, Black 2010, Gifford 2011). This has also led to a counter argument that marketing has failed to include sustainability as a core perspective, and instead of sustainability, environmental degradation, pollution, biodiversity loss and climate warming are the new megatrends (Scott et al, 2014, Yngfalk 2019. Regarding macromarketing, the discussion related to sustainability has addressed the role of the "agora" (Fisk 1967, Mittelstaedt et al, 2014), and the impact of marketing on the macro-systems of society and the environment (Kadirov 2011). Central to the field of macromarketing is the marketing systems perspective (Layton 2007, Kemper and Ballantine 2017). Layton and Duffy (2018: 401) describe path dependence as "*the interdependence between the past and the present in defining the direction of future events*". Thus, path dependence plays a critical role in the evolution and functioning of marketing systems, it is inherent in the way marketing systems form, grow and evolve over time (Ibid. 2018: 411).

2.2 Path dependence as mental models

"In the settings where marketing systems form, grow and over time face the challenges of structural and functional rigidity through impeding lock-in, the need to respond appropriately is often immediate and is felt at all levels – micro, meso and macro – as self-interest and mutuality come into play" (Layton and Duffy 2018: 410).

The path dependence approach addresses the question why change processes often do not take place although they seem to be urgently required (North 1990: 90 in Haase et al, 2009: 7). Haase et al, (2009: 1) have followed the dynamic strand of new institutional economics in their approach to path dependence and the concept of shared mental models. The focus is upon how 'macro-micro-macro' mechanisms (Coleman 1986) of cognitive systems, might support the legitimization process of certain knowledge and ideological structures over other. "*Institutional rigidity is a complex social phenomenon the source of which we see in locked or path dependent individual mental models*" (Haase et al, 2009: 3). Institutional rigidity refers to the outcome of "different levels" of forces impacting mental processes. Here knowledge and ideology are seen as social domain resources that feed into the interplay of macro and micro-level phenomena as macro-micro-macro mechanism (Coleman 1986 in Haase et al, 2009: 2). *The interaction between an individual's mental presuppositions and newly generated information also refers to what a society, or a group, has assigned to knowledge or other kinds of belief systems, particularly ideologies* (Haase et al, 2009: 6).

Tradition and societal prejudices affect the social, political, philosophical and methodical convictions and thus also the individual mental models. The notion of Idola specus – the cave mind – addresses the unconscious in human understanding and decision making (Wolozin and Wolozin 2007 in Haase et al, 2009: 17). In other words, ideology exerts influence on micro level (or even intrapersonal) phenomena as well as the macro level as a shared resource that is at the

individuals' disposal. Problems accruing from the interplay between idols related to the individual level and idols appertaining to the social level were already anticipated by Bacon (Ibid. 2009: 17).

Transforming energy systems towards sustainability presents a complex challenge, where both the social and technological aspects need to be considered (Markard et al, 2012). From a socio-cultural perspective, cognitive path dependence and mental models (drawing from institutional rigidness) (Haase et al, 2009) might provide some insights into transition challenges. A more detailed analysis of the legitimization process (Giddens 1984) might help to explain why the actual behavior of individuals (if observed by other individuals), can become a factor of influence on the other individuals' decisions (Zilber 2002).

This study focuses upon the notion of path dependence from a perspective of mental path dependence and lock-ins. It theorizes how the structures of mental models maintain certain path dependence on a subconscious level (the cave mind). This is done through exploring mythical constructs as carriers of institutions (Zilber 2002) translated in the process of energy transition, to fit the ideological "hegemony" (Fairclough 2007) of the system. As stated earlier, energy transition can be seen as a highly political and economic agenda (Tarasova 2018) and this paper refers to earlier neo-institutional work on social processes, namely the institutionalization as translation process (Zilber 2006).

2.3 Institutionalization as translation

Market actors are considered as active participants in market creation (shaping) which stems from social processes and the interdependent interplay between multiple market actors at different institutional levels (e.g. Baker et al, 2018). Institutional work explores market change through the interplay of evolving shared understandings, ideologies, and belief systems of social collectives at the macrolevel and the adoption of new practices, expectations and behaviors at the microlevel. It recognizes that microlevel practices collectively shape a market and as practices changes so does the market and vice versa (Ibid. 2018: 3 - 4). Moisander et al, (2016) show that institutional actors do "emotion work" which targets the wanted outcome in the audience. Emotion work might end up validating the opposition treating it as a threat or may trigger sensemaking that leads constituents to reevaluate and withdraw support for, or reject, institutional prescriptions.

In other words, the legitimized social rituals and roles which are usually stronger in collectives do play a role in knowledge and input. Lawrence and Suddaby (2006: 230) refer to institutional maintenance work in form of "*enabling work, embedding and routinizing, mythologizing and deterring*". Mythologizing refers to when the normative underpinnings of an institution are preserved through the creation and sustaining of myths regarding its history (Yngfalk 2019: 1568). Thus institutions are a product of those routinized activities and understandings enacted by individuals and organizations at the same time as they draw from these institutions (Lawrence et al 2013).

Generic rational myths like culture in general, should be understood as comprising a "tool kit" (Swidler 1986 in Zilber 2006: 298): *they are rhetorical and symbolic resources that social actors use and interpret dynamically rather than a given and objective entity in an institutional environment*. Each culture contains different meaning systems from which its members can borrow, mold, and recreate specific rational myths (Friedland and Alford 1991 in Zilber 2006:

298). In the case of energy transition, this suggests that the 'politics of energy transitions' are shaped by its discourses. Transition as a term has been widely used to represent planned transformation from socialist economies and one-party states to market economies and western-style democracies (Tarasova 2018). *Politics can be understood in broader terms through power defined beyond the dichotomy of agency and structure and more as knowledge and discourses* (Focault 1989 in Tarasova 2018: 129).

3. Methodology and the context of the empirical study

The empirical study builds on a qualitative discourse analysis (Jorgensen and Phillips 2002) of how market actors, with power to directly affect the energy marketplace, re-tell generic myths in the energy transition context. Discourse analysis is a suitable method "*when phenomena are scrutinized in relation to the development of wider discourses in society, such as sustainability discourses, with both institutionalizing and deinstitutionalizing implications on practices*" (Maguire and Hardy 2009 in Yngfalk 2019: 1570). "*Transition construes change as passage from a well-defined point of departure to a pre-defined destination. We can identify strategies for 'transition' which link narratives of the past and present to imaginaries for the future, drawing upon a particular sets of discourses"* (Fairclough 2007: 25). Within the translation framework, agency relates to the role of translators or editors (Sahlin-Andersson 1996 in Zilber 2006: 300). In this case researchers, professionals, leaders and consultants – who re-write or retell generic rational myths, turning them into specific ones (Zilber 2006: 300).

In this paper we address the sustainability transition of the Finnish energy system. The data consists of recordings and observations from the Energy Village project closing seminar in Härmä, Ostrobothnia 2014 and the opening seminars of Vaasa Energy Week (VEW) – the Energy & Environment Seminars during 2016-2018 (see Table 1).

Table 1. List of empirical materials

Event	Type of presentation	Number of speakers & Gender F/M	Type of Data Recorded & Transcribed: R&T, Notes: NT	Pages & material (Word Verdana 8)
1.Energy Village Seminar 2014	Panel	1F / 7M	RT	13
2. VEW 2016	Panel and individual	2F / 7M	R, NT	1 h 36 min
3.VEW 2017	Panel and individual	6F / 9M	RT	33
4.VEW 2018	Panel and individual	4F / 11M	RT	17

In these events, experts were talking to other experts as well as other actors interested in renewable energy. This enabled the use of factual terms in describing the energy system for others who act in similar roles and/or have similar interests. Accordingly, the discourses are informative and not made into more populist style to fit a larger audience. The experts can be expected to

speak out about their perspectives on consumers and businesses, the market, policy and legislation issues as well as debate these perspectives. The focus is upon what solutions Finnish institutional leaders offer to make the transition to zero emission society possible by 2030.

The seminars were recorded live by the researcher and transcribed by a professional service. The exemption was the Energy and Environment seminar in 2016 which was recorded with a mobile phone and not sent for transcription. Instead additional notes were made during the event. Table 1. shows the type of event, number of speakers and the gender division as well as the collection of empirical material. The seminars were public events without restrictions to access or gathering data as recordings. All speakers have been kept anonymous by using codes for the direct citations.

4. Findings: Powerful discourses – telling the energy myth(s)

In this paper the data analysis followed the process of standard discourse analysis (Jorgensen and Phillips 2002) as an iterative process that aimed at identifying and abstracting emergent themes that suggest how the managerial statements construct legitimacy. Analytical emphasis has been on how key actors re-translate existing myths into the energy sector and the sustainability marketing discourses (e.g. Yngfalk 2019: 1570). The analysis uncovers that marketplace myths circulating the Finnish energy market are mainly constructed around three dominant energy myths: (1) The "centralization myth - The **Energy Dragon Myth**"; (2) "decentralization myth – **Domesticated Energy Myth**"; and (3) The **Global Energy Myth**. These dominant general myths maintain several ideologically imbued rational energy myths, namely the *Rock solid*, *Big brother*, *Smart & Flexible*, *Rural resilience* and *Global village*. (See Table 2. below). Next, each of the dominant myths are presented and discussed separately.

Table 2. Energy myths

Dominant energy myths	**Energy Dragon**		**Domesticated Energy**		**Global Energy**
Rational myths	*Rock solid*	*Big brother*	*Smart & flexible*	*Rural resilience*	*Global Village*
Discourses	Survivalist	Protectionist	Neoliberal – greenspeak	Nationalist	Globalist – greenspeak
'ideological constructs'	We, the industry experts and ministry have the skills to run the grid and the nuclear plants safely and maintain the system balance.	Politician's task is to provide direction in this country. Technology will sometimes give directions bypassing the wants of politicians.	Free the market, We the market actors, consumers, big industry and politicians work together to find solutions. Finland a global forerunner in green, clean innovations	We have the biomass, We own our land We have the right to use it as we desire. Finland is too small to have any impact on global events,	Global effort Facts important Technology follows global trends ET a collective endeavor and Finland has an important role to play
How the macro actors see	Passive-Receiver Enabling the	Passive Don't worry trust us, we are	Active	Active - Passive Individual have the right to	Active Citizen as a central actor in

consumers role(s) in ET	consumer to live a normal life and remain "inert" to energy issues	the experts, just do as we tell you (and vote)	There will be more and more prosumers and active customers	decide over their energy resources	the national and global ET
How the macro actors see Business & NGO's roles in ET	Big industry and government set the "rules of the energy game". Need to adapt to system requirements – preferably big actors	Government and policy will decide what "is possible" for SME's It is up to ministry to make the right choices "the market won't do it alone"	"Small is beautiful and scalable"! Flexibility of policy makers and big actors needed to enable innovations	Existing SMEs are valuable for the countryside and nation. Policy needs to provide safety for existing traditional business	Policy needs to enable markets where new innovations can enter quickly and people can participate in the energy market
About system structure	Centralised	Centralised	De-centralised	De-centralised - Centralised	De-centralised
Sustainability dimension that becomes highlighted (How to solve energy transition)	Social: "Resilience and safety first" "The energy palette" (Nuclear, hydro, wood, peat and wind)	Social-economy "The rational political choices" We provide the world with the best know how (our engineers)	Economy-ecology "We need to change to cleaner technology" Green innovations Fast transformation of energy system Free market	Social-economic "Traditional ways are enough" "The energy palette" (Nuclear, hydro, wood, peat and wind)	Social-Ecology "Only one planet" International cooperation Greentech, innovation Active citizens, Green policy
Responsibility	The decision makers take responsibility and maintain the system	"Don't blame us – blame the system" Market and EU dictates the system structures	"We" run the system – all actors responsible for their actions. Do we want to follow or lead?	We do our best and our own thing (inside the system) as has always been done.	We need to challenge current system and take global responsibility
National Myth	*"Uraani halkeaa – läpi harmaan kiven"* E.g. When the uranium cracks – through the grey stone"	*"Kun Suomesta tuli kilpailu-valtio" ja "kun Suomi putosi puusta"* E.g. When Finland became a competition state – and fell off the tree	*"Olen juppihippipunkkari ja lennän taas"* E.g. I am a yuppie, hippie, punk and very high fly	*"Suo, Kuokka ja Jussi"* E.g. The swamp, the axe and the man (Jussi)	… "We are the world – we are the children"
Relating to others	Leader in safety and diplomacy.	Leader in 'know how' and policy skills.	Leader in excellence, technology and in	"Who cares" about the others	We collaborate and participate.

	We don't like to negotiate our energy mix with others.	We provide the world with the best engineers!	reaching the climate goals! Networking and exporting, that's how this is solved!	as long as Finland is ok. Keep away!!!	We bring our Finnish diplomacy and expertise to the globe.

4.1 Energy Dragon Myth

The myth pictures the human, consumer need to adapt to the needs of the system and "serve it". This is an interesting perspective on how the institutional logics of a socio-technical (energy) system, especially the requirements of existing technology, dictate how the market actors should act or should respond to maintain system balance. The grid has not only power (electricity) in its 'cables' but power over the do's and don'ts of its consumers and producers. Safety is a key issue here, the capacity of the nation to provide energy for all its inhabitants. The electric frequency is compared the human heartbeat, the pulse of the nation, and "We", in this myth the government and big industry experts, maintain it steady. The big actors control the field of production and distribution to maintain the energy system in balance.

"But to start with frequency that is, (--) single most important thing that we're following all the time. Because the frequency it's like the heartbeat, (of a) human being. As long as you have the frequency, in the power system everything is fine. When you lose the frequency then things go black, meaning that the society (would then experience a blackout) lose the (frequency stability). This is where we look at the frequency that's, from our control rooms. (And what these guys are doing), all the time". (1U)

The system and its experts are seen as the ones with the knowledge, and smaller actors, private companies, NGO's and the consumers should act according to these. The "environmental organization" is treated as an outsider or nuisance to the system. This reference to the rationality of the actor 'as somebody who knows the realities of current (energy) system and its poltical – economic impacts' (McDonagh 2017) paves way for minimizing and discrediting (Gifford 2011) actors who might present another logic contrary to the prevailing beliefs that are institutionally grounded (Humphreys 2014). *Beliefs in the rightness of certain institutional "realities" become so prevalent that they become so self-evidently true to the extent that behaving any other way becomes irrational"* (Prothero 2017: 3).

"To get (even use of the) existing electricity (--) in Germany because it's in the wrong place and we cannot transfer. (Thanks for the Finnish environmental organization they have not been demonstrating against energy distribution). I hope it will continue and I understand that this is the way we get the best (-) system that we accept that it has to be, transferred. (IQ)

If the system would be the dragon then the expert, the engineer would be the knight maintaining the dragon in its cave. If the dragon gets out, the system might collapse. Man as machine, part of a technology?

4.1.1 "Rock Solid" Rational Myth

Citizens, public and private sector need to collectively agree to our efforts to ensure resilience and safety for the nation.

"TVO has been in a difficult position, others have caused this challenge with the schedule, but the government looks at it sort of like 'the permission cannot be witheld' for too long because we know that we will be able to proceed regarding other stakeholders. This means we will continue to build nuclear power in Finland, and we have considered that the 'supplementary license' for Fennovoima is of best interest for Finland. So from the perspective of energy self-sufficiency we can say that it is imperative to build new nuclear power… and regarding energy self-suffienecy I consider it very important that we have a wide, diverse energy "palette" which should include nuclear energy, hydropower, peat, forest-based biomass as well as wind power. (JM)

The nuclear stays, it doesn't care about any strategies – it is the "big-brother" or father figure who stays put. This is the heartbeat.

"As I said, electricity is produced in industrial scale, so these kinds of small scale electricity production units, can become 'big' if they are supported by the government, because the market economy won't be able to do that by itself". (PK)

The way the 'market' works has its own logic, the small actors should adapt to the existing requirements. The machinery is not going to stop because of some 'drops in the ocean'. Especially as big countries, such as US, India and China maintain the power.

"It is the duty of the politicians in this country to show us the direction. Of course technology can sometimes show the direction to the politicians… electric vehicles are a good example about how technology can create a need that bypasses the politicians (will)". (R1P)

The responsibility is 'taken by the institutional actors' as it is a moral duty and obligation to look after the 'other'. The power hierarchy is clear, it is top-down.

4.1.2 "Big brother" Rational Myth

Minimizing – ridiculing - a way to look down upon local concerns as self-made barriers to growth, minimizing local concerns. This also relates to downplaying ecological concerns by minimizing and ridiculing cases making them a barrier to economic growth and social well-being as loss of jobs.

"And this has to do with the fact that we could produce more of our own technology in Finland but we end up buying from abroad… And regarding wind power, although I suppose it is

considered environmentally friendly, we have this fresh case of xxxx village that visited the parliament. They have this big wind power park project planned and now they have a problem because there has been a golden eagle nest in 1994, and they need a protected area space, but nobody has seen the eagle in 20 years, and they are not sure if it was there in 1994 either. So to speak frankly, we have a lot of these types of self-made barriers to growth." (S2)

The energy system has its own life and logic and it is affected by the National and EU strategies. Our experts control the heartbeat. Why would anyone want to tamper a system which is optimal in the way it delivers?

"*In Finland we're in good position to start this way because we do have a lot of generat- (both) generators and (especially) active already in different markets. (This is what it means when it will) (--) resources that can start in seconds or in a few min- in a couple of minutes or (--) few minutes, these are existing markets, that already are there. for example this is the regulating (-) market where power plants are started on request when supply and demand need to be bring, brought back into balance and they get a phone call and your unit and produce this-and-this many megawatts' and then they do it. And they have to do it in 15 minutes". (1U)*

4.2 Domesticated Energy Myth

This is a mixture of two opposing ideologies, the neoliberal 'glocal' market with green ideas and the rural traditional "independent" free from the grid mentality. What unites the two discourses is the unwillingness to obey the rigid rules of government and its clerks – the current 'market model' which is perceived as limiting. The first group wants to make green business and bring growth as the other wants to maintain the traditional rights of landowners and small actors to use their natural resources as they consider relevant. Accordingly, the others might be fiercely against anything considered as ecological or green values whilst the others have included this in sustainability discourse into their market logic.

"This year, Finland will turn 100 years, it is a delight to be a Finnish citizen and celebrate the country. Our country has been built by a huge number of great men and women, without whom our country would have never became the energy technology user and producer it is now. We can be very proud of the energy technological knowhow we have in this country. The days when the smoke rising up from the pipes of factories and power stations was symbolizing fortune and development are now far behind. Today, the frontrunners are the ones who trust their visions about a cleaner and better tomorrow, and are prepared to use their resources to obtain those goals. Finland is going to be the first country to quit using carbon in energy production and hopefully setting an example for other to follow. In Finland, hundreds of energy technological innovations are born each year, some might be mediocre, but some are 'pearls'. Out of these pearls new jobs, cleaner future and more innovations are created. And what's exiting, when you think about it, is that behind every one of these ideas was that one small thought in one person's mind". (3PF)

Here, focus is more on the landscape level challenges and how they impact the national market and its people. What is clear is that the energy transition should not be dictated by top-down,

external experts (or countries), but it is something where different actors are equally participating. Almost more a bottom-up perspective.

"We wanted to have statements which relate to resource efficiency, climate neutrality, which is the most important (--) today, and we also recognize that the energy system has to serve also many other interests. Some think the energy system should serve R&D, research and development (interests). Some think it should promote energy business. Some think it should promote employment. Some think it should promote quality. Some think it should promote security of supplies and so on…" (1UF)

4.2.1 "Smart & Flexible" Rational Myth

This is the Progressive – Liberal discourse mixed with green climate concerns – the modern path towards sustainability where technological and social innovations have a central role in solving the problem and the free market is the way to enable them to enter the system.

*"And still today in Finland a lot of those subsidies that are put on, for example fossil fuel (tax) reductions, that they are actually holding us back. So what we need to do is to look through all of these measures that we have, that affect energy policies, and try to get rid of all tax reductions that actually, put us, on the backbench, and look at (-) which would create, (mainly technology and new solutions). We shouldn't need specific subsidies for (wind power) for example (--) but we do need to be more effective and fast. So we need to look at, solutions where we put the market on the forefront and, that we use more renewables and, energy sources that will, create this great, change of paradigm that we can actually be carbon-neutral by 2035. (*1NF)

Here the energy system is seen as an important part of society but not 'its heartbeat', the people 'use' technology and electricity. It is the expertise of the user producer that decides what happens in the marketplace.

"I (said) that electricity is the wheels of the whole society. But the digitalization, it is, going everywhere, and we should, in our domain we should, take it, in use. We should apply it as, (most possible way) as possible, so that we have real-time measurements, what we have not today but ten years ahead we will have much much more real-time measurements, and we need new methods how to apply the measurements to run the system."(1VM)

This is the 'neo-liberal' progressive ideology at work, it uses competition as a means of 'accelerating' action. The action is needed to cut emissions and become a leader in the new, greener system. There is a critique towards the stagnation and rigidness of the slow European and Finnish institutions that don't allow fast tracking of new innovations.

"do we want to be one of the drivers of this process and actually (--) or are we one of those who just, follow behind (--) and don't get to be the drivers of the process also by producing new solutions. This is the dilemma of Finland and Europe today. We are all saying that we want to be (-), but we don't have, a system in place which would promote these solutions into the markets or we don't have the R&D, inputs to actually (take the steps)." (1R)

4.2.2”Rural Resilience” Rational Myth

As the other side of the coin, the traditional ideology, shares the ideas about freedom, and non-interference from top-down policies. Here the interference is negative because it forces new (ecological) restrictions to the traditional ways of doing things. This is the very ‘rural’ myth where the ‘normal people’ should be left alone to do their things.

”One thing I would like to add regarding the EU legislation is that we have stay vigilant that there is no ’side way in’ to start messing with the Finnish forest politics. All that has to do with how we use pour forests must be maintained in our national ’hands’. To find solutions to the climate problem, I see (from my minister position), that they try to introduce actions that interfere with the use of Finnish forests. And that, what the forests are like here in Finland, how they are used, taken care of, the Europeans have a hard time understanding it…and regarding energy self-sufficiency and what Finland needs in the future. Finland needs heating and cheap electricity for the households and companies. The big picture shows that Finland will be needing nuclear power even in the future, so instead of putting millions and millions of euros in importing electricity, building more nuclear power will have positive effects on the Finnish economy. (JSM)

The bio-economy, thinking is ‘close to heart in this myth’ where there is a strong emphasis on the ownership of the ‘material’ (nuclear, wood, biomass) which is considered as the basis for the common good. Others (EU, the government) should not interfere with the way the natural resources are dealt with in Finland.

Politics have obviously a say in what is put forwards each time. But I would see that it is important that we still have wood and peat to use alongside with new solutions. We still import coal and so on… I would leave that and use the raw materials that we have naturally and which is renewable, and we can make energy out of that. It brings work to the countryside and that is something we need here! (R1P).

Work and traditional ways of producing are ideations that circulate in this mythical field. There are needs that must be prioritized before the ‘green needs’, the climate challenge is somewhere in the landscape and normal people shouldn’t be bothered by those landscape level challenges.

4.3. Global Energy Myth

The Global Energy Myth could be considered a convergence of the two earlier collective mindsets, it approaches national challenges and their solutions as global goals. This is also where the big challenges such as climate change and biodiversity loss are expressed as environmental concerns and as drivers of the energy transition. Discourses deriving from these ideological constructs emphasize collaboration and openness ‘over the boarders’.

“Here aren’t really any technological or economic barriers anymore to, getting to hundred per cent renewable energy, anywhere on the globe, but it does require quite strong incentives and it

does require us changing, the whole system of energy supply (and demand). One of the most important things, requirements for this to happen is a very strong (politically binding) long-term (goal that) (--) is where we are going towards. This is something that we got a little bit from the Paris Climate Agreement (--) very strong regional, and national goals to, really get there and to make this as binding as possible. That is needed, really to provide, show the direction, send a clear signal and also to returns that investors need, and those companies who are actually doing the research, development, (operationalizing of all this). (SHF)

4.3.1 "Global Village" Rational Myth

There is a big, global challenge affecting the lives of all people on the planet. This is not the time to wait and see but to act. There are economic benefits as well, to be among the frontrunners. Systems thinking is needed to solve the problems and this is also existing, it enables new ways of collaboration.

So, the world is changing and there are many, megatrends that are affecting the energy sector. At our company, we believe that the transformation of the energy system, is already ongoing. We believe in more, efficient energy system. This kind of, system takes into account two major challenges. First of all, we need to improve the energy efficiency and resource efficiency, and secondly to, decrease the emissions of greenhouse gases. We need to be thinking of these two, challenges at the same time. (1QF)

The national 'strengths and weaknesses' should be used as experiments to bring solutions to the global market. Best practices – the Finnish 'sisu' has enabled the development of a highly technology oriented society. Now it is time to bring this knowledge to others outside the boarders.

Finland is becoming more international, (but this view rather looks for) self-sufficiency. At the same time there are interesting things, (this type of thing that) (-) are important, that the regulation method of network companies must promote the development of (-) that are (--) independent, to function as part of the distribution network infrastructure (--) solutions at the same time. (So there's a) local element, self-sufficiency, (-) and also another statement potential energy (islands and) using local resources efficiently, and improving the security of supply (--) disruptions must be explored and tested. So more national resilience to the energy system was called for by these experts. (1RM)

'Finns' are seen as having the capacity to 'lean out into the big world'. As a unified country with similar views (or not) collaboration and doing together is almost inbuilt into the system. Effectiveness is something central to the Finnish worldview, it is an organized mentality.

We don't have highly divided views (-) Finnish key stakeholders. They seem to share relatively lot (from the) . Results. (--) the most predominant view among these stakeholders, and we called it (--) competition on resources and producers, (--) (technology-neutral and smart solutions). This view accentuates international competition among energy sources, international energy markets, (and is) strongly in favor of the (Nordic) (-) market, and it thinks this is the effective way of organizing, energy supply. (1R)

Discussion

Governments are regarded as key actors in shaping markets to sustainability (McDonald et al, 2012, Mazzucato 2016 in Ottoson et al, 2020). To reduce environmental degradation, policymakers and governance are central actors in trying to figure out ways to re-direct or slow down consumption as well as re-structure what is produced (McDonald et al, 2012). It is also on the macro-level that the power is given to the legitimized experts of a socio-technical system. The notion of experts, or expertise, e.g. who has a say about energy related questions can be described as asymmetrically structured agency (Stirling 2014: 84). Expert systems form an important part of socio-technical (energy) marketing systems (Grin and Grunwald 2000) these being networks of technical specialists, monitoring technologies, performance standards, regulative processes, and analyses of tradeoffs between calculable risks and expected benefits to the population (Beck 1999 and Tulloch and Lupton, 2002, in Humphreys and Thompson 2014: 880). As argued by Humphreys and Thompson (2014: 881) expert systems are institutional relationships where the consumer's dependency on them demands trust. Their (Ibid. 2014) research on uncovering system embedded barriers to sustainability, shows how consumers perceptions of systemic risks such as oil spills or nuclear accidents, so called disruptive events, are shaped by institutional and ideological structures and the reliance on experts

Especially, neoliberal ideas are associated with trust in market forces and "*ascribing value to factors that haven't been ascribed economic value befor'*" as well as an emphasis on political consensus and governance (Tarasova 2018: 128). Research in the field of macromarketing and new political economy, suggests that as the dominant social paradigm (DSP) of industrialized western societies is connected to the economic institutions (Kilbourne et al, 2012, Varey 2013), and these "*initiate, direct and reward economic behaviors and that these institutions become so prevalent that they become self-evidently true to the extent that behaving any other way becomes irrational*" (McDonagh 2017: 3). New cultural political economy claims that these conditions are not only political but also cultural, and include discourse: the cultural turn is also a turn to discourse (Fairclough 2007: 28-29). This also refers to the hegemonic positioning (Levy and Egan 2003) of the term sustainability in public discourses, resulting in legitimization of the continuing exploitation of natural resources instead (McDonagh 2017, Yngfalk 2019). The productivist discourse (Smith 1998 in McDonagh 2017: 12) is central to the DSP of Western Societies. *"While it is clear that many initiatives have been proposed with success on the production side, much remains to be done regarding the future of the productivist discourse as it relates directly to consumption (McDonagh 2017: 12*).

The neoliberal agenda might prove an impossible fit for this agenda as it is constructed to maintain a growth orientation and individuals consider material ownership central to their well-being and inner safety (Kilbourne et al, 1997). It may also be the case, that within the organizational context of the Westernized modern world more generally, for theorization or translation to be successful in fostering the diffusion of structures and practices, it must rest upon some vision of the modern (Zilber 2006: 300).

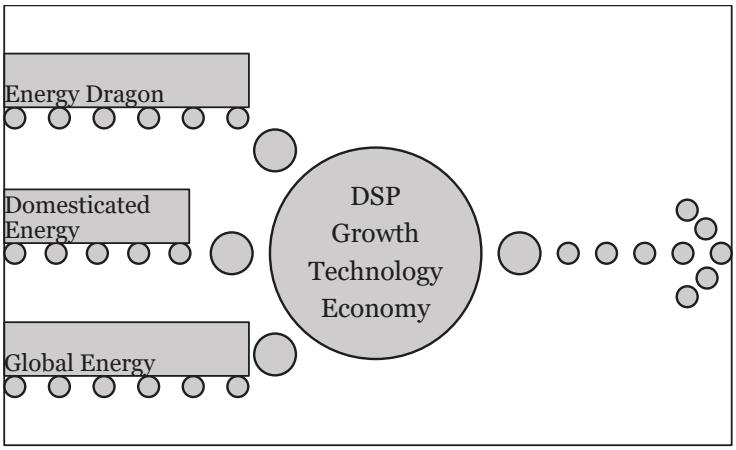

Figure 1. Myths as hegemonic processes of path dependency as mental models

The findings present us with three dominant energy myths which are connected to differing rational myths that express a variety of mindsets and ideologies. They offer different solution pathways to achieve the same result: economic growth and technological innovations (see figure 1.). This highlights the inherent hegemony of dominant institutional structures (Dunlap 2008: 14) and shows how path dependence as mental models might exist at a level, where the actors telling the myths, are not conscious of their own 'paradigm-bias', in regards to the requirements of the sustainability challenge. In other words, (metaphorically speaking) the systemic transformation might require planting orange trees, but the actors continue planting apple trees as that has been the tradition, and they cannot see the difference between the seeds nor have knowledge on how to grow oranges.

Conclusion

The aim of this essay was to understand how macro level, key actors in the Finnish energy transition, construct and translate their energy reality to others. To explore what kinds of energy myths circulate the Finnish energy marketing system a discourse analysis was undertaken. The dominant energy myths found were: Energy dragon, Domesticated energy and Global energy. These dominant general myths maintain several ideologically imbued rational energy myths, namely the Rock solid, Big brother, Smart & Flexible, Rural resilience and Global village. The rational myths help us deconstruct and analyze the actual process of translation (Zilber 2006). Thus, focus is on the ideational – exploring institutionalization dramas through their ideational facets may help us to understand the translation process better. In other words, we can suggest five sustainability transitions related discourses (rational energy myths) as market shaping forces in the Finnish energy marketplace.

As discussed earlier, there is a call (see Antal et al, 2020) for transition scholarship to focus on unsustainable trends to help curtail harmful socio-technological changes before they become entrenched. This is an important perspective as the dangers of the DSP as path dependence might lie in the new innovations just causing new types of environmental and social (sustainability) problems. The findings show that macro-level rational myths legitimize experts, e.g. position others (and themselves) into key roles in the energy transition. By tapping into mythic constructs

that appeal not only to the conscious, rational mind of the receiving audience, but translates from and speaks to the deeper, cultural-collective subconscious. Thus, this also points to the existence of a dominant social paradigm that functions as a base for distinct accepted mental models.

Rational myths that draw from the socio-cultural structures of a socio-technical energy system both maintain and challenging it. The question becomes, if the core assumption is the same, how can we expect change on a transformative level which in fact implies actions contradictory to the core beliefs of the DSP? Thus, it seems that myths 'swim' on the surface of a socio-technical system, they may challenge the material and social set up of the regime, but fail to address the root issues to sustainability problems as they are inherently driven to exploit not regenerate. As a paradigm shift entails transforming a system starting from its paradigm-roots, and the paradigm is an "unquestioned, legitimized truth" this is hard. Marketing, and especially branding, when it uses cultural disruptions as an entry point (Holt 2004), is tapping into the 'mythical world' of the human consciousness. Traditionally the use of marketing tools has been directed to maintain or shape the dominant structures of the DSP, which means providing more material for the subjects to maintain and construct their identity through consumption of 'things'. We might want to consider, that by doing so, the myths move further and further away from the original core of the mythological constructs in the ancient stories which were to provide people with inner tools to navigate the outer world. Does it make outer tools more powerful?

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