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VOICES FROM THE FUTURE: PIONEERS AS A SIGNAL OF CHANGE

Futures Studies

Master's thesis

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There are several options, perspectives, and presentations for outlining the future. The key here is the question of change: what kind of change awaits us and how it will be achieved. In understanding change, the question is often approached in the light of weak signals and past trajectories, but change can also be anticipated through concreteness: by experimenting and producing artifacts or intangible assets that emerge from own goals and a mission. Thus, the aim is not to understand the future but to encounter it in a straightforward way: through a creating process.

The progress of phenomena tends to follow a curve of development, beginning with the individuals, the pioneers, who are the ones creating the initiatives or who are the first to adopt them. These forerunners take the first step in a possible change to come. The aim of this study is to shed light on the future from the perspective of pioneering and pioneers: what are the characteristics of a pioneer and what kind of futures can be expected based on their views.

The empirical part of the study is based on personal thematic in-depth interviews. An essential factor for the topic is the delimitation of the target group. In this study, 11 individuals were identified as pioneers and further, selected as respondents: they strive for change and actively conduct experiments according to their own vision. In addition, the target group was limited to persons whose activities include a self-sufficient aspect.

There are 11 pioneering characteristics identified based on the interview material: 1) Personal resilience; 2) Network and charisma; 3) Spirituality and metaphors; 4) All instincts in use; 5) Perfect timing; 6) The miracle of unplanning; 7) Surrendering to flow; 8) Licence to make mistakes; 9) Controlled anarchy; 10) Making impossible possible and 11) The playfulness.

Further, the categories were analysed through a futures table analysis to derive futures images providing views for possible futures. Based on this, three futures images were pictured: "Pioneering-generalist" describing a strong, self-directed individual and a project-driven society; "Experimentalist" based on creativity, playfulness, and experimentation and "Techno-utopist" leaning on the unlimited technological resources and the integration of technology and human.

Key words: change, pioneer analysis, pioneering, futures research, futures image.

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Tulevaisuuksien hahmotteluun on olemassa useita vaihtoehtoja, näkökulmia ja esittämistapoja. Näissä kaikissa on kysymys muutoksesta: minkälainen muutos meitä odottaa ja miten se saavutetaan. Muutoksen ymmärtämisessä asiaa lähestytään usein heikkojen signaalien ja aiempien kehityskaarien valossa, mutta muutosta voi ennakoida myös konkretian kautta: kokeilemalla ja tekemällä asioita, jotka kumpuavat omista tavoitteista ja missiosta. Näin ollen tulevaisuutta ei pyritä niinkään ymmärtämään vaan siihen suunnataan suoraviivaisesti tekemisen kautta.

Ilmiöiden yleistyminen seuraa yleisesti kehityskaarta, jonka alkupäässä ovat henkilöt, pioneerit, jotka luovat kyseiset asiat tai ottavat ne aivan ensimmäisenä käyttöön. Nämä edelläkävijät ottavat siis ensimmäisen askeleen mahdollisessa muutoksessa. Tämän tutkimuksen tavoitteena on valottaa tulevaisuutta nimenomaan pioneriteetin ja pioneerien näkökulmasta: mitkä ovat pioneerin ominaisuudet ja minkälaiset tulevaisuudet meitä voi heidän näkemystensä perusteella odottaa.

Tutkimuksen empiirinen osa perustuu henkilökohtaisiin teemallisiin syvähaastatteluihin. Aiheen kannalta olennainen tekijä on kohderyhmän rajaus. Tässä tutkimuksessa vastaajiksi valittiin 11 henkilöä, jotka on tunnistettu edelläkävijöiksi: he pyrkivät muutokseen ja tekevät aktiivisesti oman visionsa mukaisia kokeiluja. Tämän lisäksi kohderyhmä rajattiin koskemaan henkilöitä, joiden toimissa on mukana omavaraisuutta edistävä näkökulma.

Haastatteluaineiston perusteella pystyttiin tunnistamaan 11 ominaisuutta, jotka kuvaavat pioneriteettiä ja edelläkävijämäistä toimintatapaa: 1) henkilökohtainen resilienssi; 2) verkosto ja karisma; 3) henkisyys ja metaforat; 4) kaikkien aistien käyttäminen; 5) täydellinen ajoitus; 6) suunnittelemattomuuden ihme; 7) antautuminen flow-tilalle; 8) lupa tehdä virheitä; 9) hallittu anarkia; 10) mahdottoman tekemisen mahdolliseksi ja 11) leikkisyys.

Tunnistetuista kategorioista johdettiin tulevaisuustaulukkoanalyysin avulla tulevaisuuskuvia, jotka tuottavat näkymiä mahdollisiin tulevaisuuksiin. Tältä pohjalta avautuu näkymä kolmeen tulevaisuuskuvaan: vahvan, itseohjautuvan yksilön ja projektiluonteisesti toimivan yhteiskunnan ”Pioneriteetti-yleisosaja”; luovuuteen, leikkisyyteen ja kokeiluihin nojaava ”Kokeilija” ja rajattomiin teknologisiin resursseihin ja teknologian ja ihmisen sulautumiseen perustuva ”Teknologia-utopisti”.

Avainsanat: muutos, pionerianalyysi, pioneriteetti, tulevaisuudentutkimus, tulevaisuuskuva

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1 Introduction

1.1 Background of the topic

The research idea and process were launched originally in March 2019, when I met a person with a strong pioneer attitude: a gentleman who lived true his visions of the future every day as an active implementer of his ideas. Simultaneously, I experienced a personal concern and a doubt about the general need for futures thinking procedures and especially about my role as a facilitator and promoter for it. Luckily, after meeting this unusual gentleman I developed a strong desire to look at future thinking through concrete doing. Would it be possible to understand the future through own experiments? Though, proactivity is mentioned to be one of the characteristics of futures research (Heinonen 2013) its role and significance had remained unclear to me until this point. From a more theoretical point of view, I got particularly interested in the contradiction and difficulty of categorization this approach.

Pioneering as a research topic has been examined in a field of futures research to some extent, especially from the perspective of organizations and strategic foresight (see e.g. Kurki 2020) and of industries in transition (see e.g. Heinonen & Karjalainen 2019). The pioneer analysis approach and methodological stance was originally presented in the context of evolution of countries and cultures (Heinonen 2013). Due to my own interest and the limitations of the master's thesis research scope, I will cover the topic with one area of pioneering in mind: from the perspective of the pioneers with self-sufficient attitude.

1.2 Why pioneering

Our present world is the result of the hopes and changes of the past: of those which came true and those which did not. Professor Alf Rehn states (2018) that the future is waiting for a moment to come true. Everyone seems to be thirsting for change, but it tends to happen through painful confrontation and even conflict (Salonen & Joutsenvirta 2018). As Saarinen (2021) postulates, the world favours obedience, and normative activities.

However, someone always creates the future. If it is not you, it is someone else. Pioneers possess black and white, unconditional, and even stubborn thinking: they see a world that the rest of us do not see (Heinonen & Karjalainen 2019). This, on the one hand, calls for

restraint and perseverance. Raami talks about creative insanity (2017) - or just creativity that most of us cannot reach. Or maybe we can, but the common conventions ruin our plans in the process (Blombstedt & Saarinen 1980; Rehn 2018; Saarinen 2021). It seems that in our performance-oriented society, human life has shrunk to the size of economic growth (see e.g., Meadows et al. 1972; Salonen & Joutsenvirta 2018; Walker et al. 2006). Here, the changemakers and pioneers have a potential to demonstrate further that it is possible to create a new standard of life that raises us all to the full potential (Heinonen & Karjalainen 2019, 61).

In the end, how the future is materialized in practice is ultimately up to us. The Nordic welfare state is changing, safety nets are being torn apart, administrative institutions and organizations are cramped, and individual citizens are experiencing the transformation from an industrial society to an information society (Salonen & Joutsenvirta 2018; Wilenius 2017). We have reached a point where the global threats may appear to be greater than the local opportunities. Due to this, it might be difficult to imagine different and desirable futures, let alone taking action to implement them. This, I think, highlights the special need to present attractive futures with possibilities and positive challenges and reduce the potential fear of global catastrophes and dystopian changes.

So, how do you set and follow your dreams and wake up the inner call for action? These questions are strongly in my mind as I selected the subject for the thesis. Answering these questions requires both to review the existing research on the topic and deep dive into the subject through personal interviews. Like the pandemic year 2020 revealed, the world seems not to change exactly as we wanted. The change seems to take time because ideas need to reach a sufficient number of different strata of society (Heinonen & Karjalainen 2019, 64). But it is possible, even necessary. Because the circumstances will never stay the same for eternity.

In this respect, futures thinking should not, and it does not, exist only inside the rigorous scientific analysis box. After all, the future does not exist, so it cannot be explicitly explored either (Malaska 2013; Rubin 2014; Tuomi 2019). Individuals who make their own experiments beyond mainstream practices are easily regarded as insane rather than genius with their “radical innovation” approach (Heinonen & Karjalainen 2019, 65). However, the mean tends to change from fluctuations in extremes. As there is no data on future, it can be argued that futures thinking calls to some extent for unnormative views

outside the discipline and field as well (Salonen & Joutsenvirta 2018; Blombstedt & Saarinen 1980). I feel that a futurist has a special duty to identify the grievances in the world of today and say out aloud those blind spots that degrade human dignity and prevent society from developing.

The world is full of heroic stories about business pioneers and get-rich-fast individuals among the start-up culture (Covin et. al 2000; Wilenius 2017). Related to this, this thesis does not at the first-place concentrate on pioneers from the perspective of capitalist success but instead seeks to find individuals whose personal lifestyles and personal lives manifest pioneering through their concrete action. With that in mind, the main research material consists of the personal interviews. Here, I interpret interviews mainly as narratives of pioneering lives. The other empirical material is sought out to enrich the theories and narratives of the interview material. The theoretical cornerstone of my research relies on the theories and approaches of constructivist foresight and pioneer analysis.

With the background research and the interview material I aim to shed light especially on the characteristics of pioneers: what are they really focussing at when setting the future direction. Simultaneously, I put thought in discussing how pioneers succeed in driving development in the right direction and to make visible what are the choices done, in what circumstances, and in what situations. In the end I conclude the thesis with the discussion on what kind of future is waiting us in the long term by using thoughts and principles by the changemakers and pioneers concerned.

1.3 Research questions and hypotheses

Some futures researchers (see e.g. Hiltunen 2013; Meadows 2009; Wilenius 2017) highlight that it is the ethical duty of the futurist to create a purpose for everyday life and choices at the individual level by attaching our way of life and culture to a bigger picture. Here, the uniqueness, meaningfulness, relevance, trust, and joy of life are available to all, but they do not increase in society unless special attention is paid to them. As a futurist Wendel Bell postulates (1997b), a futurist aims to promote a meaningful life. Meaning that each person carries their own history and culture and through it their own life missions, visions, and goals. Exploring and realizing the possibilities of the future in the present stage is therefore based on the utilization of information, which exists in different

signs, meanings, assumptions - and in experiments (Heinonen & Karjalainen 2019; Malaska 2013).

The primary approach in this context is to view the future as a biographical place that is alive and prone to change. With this respect, the aim of this thesis is to examine the futures images provided by the pioneers. Accordingly, the basis of the study is structured by the theories and concepts related to experimenting and pioneering. It will focus on the characteristics of constructivist foresight and pioneer analysis – described and discussed in detail in the section 2.

The main research question gathers around the following question:

A lesson learned from the pioneers: what kind of future is waiting us next?

The study will approach the main research questions from several perspectives:

1. What are the key drivers for the lifestyle of a pioneer?
2. How is the future made in practice (carried out / implemented / manufactured)?
3. How do pioneers' perceptions of the future differ from the ideas of the futures research community?

The general objective of being a pioneer in a world which is said to become more complex and unpredictable requires status that embraces the uncertain and abandon the conventional. Pioneers acknowledge the diversity of possibilities and with that, they encounter the future in a unique, bold way (Heinonen & Karjalainen 2019, 62).

My hypothesis concerning the main research question is that *the pioneering process and its outcome produce strong signals on future.*

With this question I aim to shed light on the goals, designs and perspectives that can be seen with pioneering practises and what kind of promises they hold. Further, I study through futures images how these elements can expand the boundaries of the imaginable futures.

My hypothesis covering most of the sub-questions is that *calling to the cause overcomes the social pressure to follow the conventions.* Meaning that, to some extent pioneer's curiosity exceeds general moral rules. This, in turn, provides a clearer route to both the

vision setting and the implementation of it by ignoring the public opinion. To map this field the interview contains issues about the personal life of the pioneer: way of living, tipping points, choices, possibilities, and paradigms. In practise, to seek answers to the questions of why, what, and how the certain operation is in use.

1.4 The role and the originality of the research perspective

Karl Popper's (1995) view of the future evaluates that it is not even possible to predict the future because its shape depends on us. So, the future depends on *inventions* and *innovations*, but because everything has not been invented yet we do not have concepts for all the new and ever-changing phenomena of change we face every day. Meaning that if we knew the change to come, we would have done it already (Popper 1995). Here, It can be argued that we constantly take a stand on the future with our thoughts, speech, and actions, either consciously or unconsciously. The personal relationship to the future diminishes in meaning when the matter under consideration is geographically or temporally distant. Therefore, the past, present and future form a seamless continuum.

We are witnessing an era of exponential change, which places the pressure for the disruption not just for the institutions and organisations but on an individual level as well (Walker et al. 2006; Wilenius 2017). One of the most important tools for embracing the information age and the information society is proactivity, which can be understood both as an ability (and therefore as a desire) to be involved in making and planning the future and as an awareness of the fact that the direction and quality of the future ultimately depend on us (Wilenius 2017). Thus, proactivity requires initiative, and responsibility for choices and continuity despite of the prevailing uncertainty (Rubin 2010). Here, this group of individuals have a special drive to renew the system, a character distinguishing a human from other animals (Malaska 1999).

Therefore, knowledge of megatrends and time series alone will not prepare for the future (see e.g. Malaska 2003, 2013; Wilenius 2017). On the human scale, the mean consists of individuals whose majority decide the mainstream phenomena and standard. Though, extremes tend to change the average and therefore pioneers and individuals living in the marginal in the society have an important role to change the standard. in other words, pioneering might produce signs of a disruption or it is the first symptom of a change that may be significant in the future on a large scale. Such a weak signal is a surprise to its interpreter: it forces to challenge assumptions about the current and therefore it is often

easy to ignore. The key question then focusses on whether there is something in the lives of pioneers that does not remain purely a weak signal but becomes mainstream phenomenon instead (Heinonen & Karjalainen 2019).

According to Economist Tuomas Malinen (2020, 2021), self-sufficiency might play a vital role in surviving in the next decade: the era without massive global loans, deals, and alliances. Spontaneously, self-sufficiency might sound uncool, old-fashioned, and bit too patriotic topic in our contemporary society etched with a globalized liberal lifestyle, in which the focus of development and progress is primarily measured through turnover alone (Klein 2001; Salonen & Joutsenvirta 2018). By analysing pioneers concerned, this thesis aims to rich and provide novel perspectives to the ongoing discourse from this aspect as well.

Related to this, a futures research pioneer Malaska (2013) divides futures research into three different categories: syntactical, semantical and pragmatical segment approaches. Out of these segments, this research setting has a strong pragmatic orientation by aiming at both to understand the situation at hands and to help to make it concrete. Amara (1981), in turn, presents futures research in three categories: the possible, the probable and the preferable futures. For the latter's he argues that the future can be influenced, i.e., the future is *made* through specific actions, decisions, and progress steps.

With this respect, Checkland (2012) continues the same theme by underlining that the human mind does not make an exact distinction between theory and practice. Our thoughts and understanding of the world make us do and experience things and vice versa: experiences are the source for our thoughts and ideas.

In addition to the interview material, the thesis clarifies pioneering as a proactive method and approach. Here, Walker et al. (2006) discusses that the ability to understand and prepare for complexity can increase the resilience of societies. By analysing pioneering as a proactive practice, this thesis seeks to increase understanding of the possibilities the human being needs to survive in contemporary complex environments.

The two key theoretical concepts of this paper gather around themes by constructivist foresight and pioneer analysis. As the goal is to comprehend future mainly from the perspective of creators and makers, these approaches hold a promise for a suitable framework. In terms of methods, the dissertation uses semi-structured personal interview

material as a main base for the analysis outcomes (the futures tables and the futures images).

1.5 Outline of the thesis

Like the figure 1 describes, the structure of the thesis is divided into three parts consisting altogether of 7 sections which one by one aims to deepen the understanding on the interpretation of the pioneering characteristics and spirit. The introduction, section 1, serves as the beginning of the story, in which I describe the starting points and objectives of the research: especially the key concepts, the research questions and the structure of the research. This is deepened further in the section 2 which presents the theoretical framework for the study, bringing together the most relevant views, concepts, and research findings in the field and topic. This section provides the theoretical frame by using the constructivist foresight and pioneer analysis theories as well as shedding light on the concepts of self-sufficiency and subsistence economy.

BACKGROUND	Introduction Constructivist foresight Pioneer analysis Self-sufficiency and subsistence economy
EMPIRICAL PART	Thematic qualitative analysis of the interviews
REPORTING & ANALYSING	Futures tables Futures images
DISCUSSION & CONCLUSION	

Figure 1. Research process outline.

The empirical part of the study described in the third section in the thesis focus on pointing out the research choices, target group, and the method itself in detail. This is finalized with discussion on possible quality issues and ethical concerns of the study. This is followed by the qualitative thematic text analysis provided in the section 4 presenting the semi-structured personal interview material concerned. Considering the focus of the thesis, the personal interviews play a big role in the empirical material set. The section 4 covers this task by summarizing the key findings of the personal interviews: what are the

themes and remarks emerging out of the pioneers' opinions and statements. This is enriched with the relevant quotes by the respondents.

The reporting and analysing part provided in the section 5 captures the pioneers' views and conceptions as well as the relevant theories and research described in previous sections through the descriptions of futures tables and futures images. With the help of the futures table analysis, the routes and synthesis of the paths behind the futures images are clarified and investigated further. Here, the analysis sheds light on the research question: what kind of futures could be imagined by understanding the pioneering and pioneers concerned.

The thesis concludes with the sections 6 and 7, in which I both summarize my interpretation of the topic and draw conclusions out of that. In these sections I provide discussion on the pioneering spirit as a potential signal of change with the reflection on the insight and analysis covered in the previous sections. To conclude, I propose some topics and agendas which I find valuable to explore further.

2 Theoretical framework

2.1 Constructivist foresight

2.1.1 The basis and the idea of the approach

According to Checkland and Scholes (1999, 20), we observe and understand the complex world by constantly interpreting it through the internal models we have learned through our lives. While the surrounding reality is complex, chaotic, fuzzy, and uncertain, however, we form and see rational patterns in it – whether those exist or not (Gleick 1988; Wilenius 2017).

The future which eventually takes place is just one of many options that now appear as mere possibilities. Here, the one out of these possibilities, which then realizes as the future is the result of the combined action of various actors and factors, both human and non-human (Godet 1994, 36). In the same way, the reality of our lives today is the result of past decisions and choices, their consequences, and things dependent on human action.

With the information society and technological developments, our reality is already becoming increasingly difficult to define (Hiltunen 2013; Meadows 2009; Wilenius 2017). It consists of abstract phenomena and parts whose interrelationships, causes, and effects are difficult to understand. In this way, the boundaries of the possible are constantly redrawn to be rebutted again in the face of new information after a while. Related to this, a futurist Jim Dator argues (2009) that we reactively emphasize more how to adapt to change and new challenges, rather than proactively think about how to influence the direction and quality of development itself.

The future, the present and the past are aspects of time, and a person's orientation to time determines how he or she perceives the future (Heinonen 1990, 84). Bjerstedt (1992) talks about the negative, neutral, or positive future investments which burden our perceptions of the future. Further, these thoughts then determine the choices and tasks made. All in all, the future investments seem to play a significant role through which we react to the future and its challenges, whether it is expected or whether it produces fear.

However, one of the most important tools for embracing the information age and the information society is proactivity, which can be understood both as the ability (and therefore the desire) to be involved in making and planning for the future and the

awareness that future direction and quality of it ultimately depend on us (Kurki 2020; Wilenius 2017). Thus, proactivity requires initiative and responsibility for choices: how we react to our error inevitably affects the consequences of the error.

2.1.2 Constructivist foresight applied in the pioneering context

Alan Kay's famous claim "the best way to predict the future is to invent it" (Tuomi 2019, 10) encapsulates the constructivist approach in short. Here, "the future is not known or understood; instead, it is something to be created" (Tuomi 2019, 8) – meaning that the future is approached by design, experimentation, and learning. If the change is possible, in the sense that it is not against the laws of nature or, for example, prevailing biological boundary conditions, it is ultimately a matter of a question of the social, economic, and technological abilities and about the desire to make the change (Gilbert 2016; Wilenius 2017). Thus, the future will become a transparent and an open space which can be influenced.

Tuomi (2019) states that the central idea of constructivist foresight is that future is the result of the person's own actions. It is often situational, contextual, and the result of interaction. The constructivist foresight places greater emphasis on design and creativity than other foresight concepts. As a foresight practise it requires openness, interaction and knowledge sharing and it has a participating and alterable tone in its doings (De Moor et al. 2014). From the futures research perspective, I feel, this changes the role of a researcher from a specialist to a process facilitator and interpreter of the outcomes: to fill the gaps in the written or spoken story.

The constructivist conception of information is applied, first, to information structures formed by the individual. According to it, each individual builds his or her own knowledge environment. The main purpose is to assess the viability of information structures from the individual's own point of view: how well they serve the goals. In this respect, constructivism comes close to pragmatic information theory, according to which the criterion of the validity of information lies in its functionality in practice (Sundin & Johannisson 2005).

Tuomi (2019) highlights in his article that constructivism creates a structure of thoughts through which the aim is to create order in the world of experience. In its radical form, this notion argues that scientific theories do not seek to describe reality beyond experience

but only to create alternative ways of structuring the world of experience. He states further that knowledge, and further on experiment, is a reflection of social forces such as ideologies, religions, histories, human interests, and group dynamics. Here, the value systems and worldviews prevailing in society influence the creation of knowledge accordingly.

The experiential approach describes the process by which pioneers share their own lives in relation to creating the future. Again, according to Ilkka Tuomi (2019), in the constructivist foresight interpretation, futures are not viewed objectively, that is, as pure assumptions, but rather as a result of human interpretation, action and meaning giving. The deeds then have no universally shared content. It can be argued that the layers of experience give a special acknowledgment to a place, emphasizing the uniqueness of an individual's experience.

Yet, the reality of pioneers and experimenters is challenged with value and ethical issues (Kurki 2020; Tuomi 2019). When making the future, it is not enough to understand reality and truth alone, but the goal is to understand how things could be at their most optimal (Bell 1997b). Futures research and foresight thinking has been said to be heavily value driven. This is a reversal of the thoughts of Pentti Malaska and Wendell Bell in particular. For the latter's ideas, the nature of futures research appeared not only as a participatory but also as a value-bound discipline (Bell 1997b). Bell's values emphasize research that promotes freedom, sustainable development, and well-being whereas Rubin (2010) reminds us of our perceptions of the future. Besides this, most pioneers tend to share utopian, "out-of-box" thinking (Laaksonen 2020; Raami 2017; Wilenius 2017). Here, the good, and aspirational, evil, and avoidable, essential, and important, irrelevant, and useless depend on language, culture, history, traditions and customs, myths, worldviews, values, ideologies, and ideals by the experimenter or the pioneer concerned.

While the role of institutions and international agreements seems to be significant in creating the future, societal change can be triggered by the actions of just a few people (Kurki 2020; Heinonen & Karjalainen 2019). One conversation can turn into a world-changing series of events (Wheatley 2009). In this light, the far-reaching visions, utopias, by the forerunners offer a standpoint and basis to futures (Masini 1999, 40).

Accordingly, these lists are interrelated, i.e., our understanding of knowledge and science is by no means self-evident. Rather, it is only one interpretation of reality (Rubin 2010,

5). It may be argued that, in terms of futures research, constructivist approach enriches existing methods and aspects by providing a means to comprehend the diversity and stratification of views, as well as the impact of one's own perspective.

2.1.3 The aspect of time

Blinniko (1982) argues that human consciousness is related to the past, present, and future, and events and their interpretations in these different time dimensions affect both consciousness and the level of orientation that is most easily chosen. According to this, some of us are past- and authority-oriented, while others are more present- or future-oriented. Future-oriented people believe that the future will generally develop to be better than the present stage and that problems can for most part be solved. For them, a change appears to be an interesting challenge, a licence to break the rules. (Rubin 1998; Gleick 1988).

Understanding the forces of change and alternatives to trends is both sensible and necessary - but easily left without noticing (Hiltunen 2013, 26-27). Thus, these states of future orientation are not necessarily mutually exclusive, but in most cases, one of them is more powerful than the others, depending on the personal history, or positions.

The past, present and future are interrelated and affect each other (Tuomi 2019, 3). Though, in the constructivist foresight approach the importance of the present is emphasized, since there is no similar material density in the past and the future. Here, it can be argued that the present is in the observational position that can be realized, surrounded, and toned by the past (memories) and the future (expectations).

Tuomi (2019, 4) describes the experience as a daily adventure: a state of mind; a memorable, and meaningful journey reflecting personal courage and curiosity. Experience, therefore, means understanding things in a certain way and it is characterized by the interaction of the person and the environment. Altogether, dedication to different places and events stimulates change (Saarinen 2021). Kurki (2020) approaches this idea more from a phenomenological point of view, that is, through a holistic experience of the place, practises, and circumstances.

Robertson (2012, 347) points out that altogether, we should acknowledge and identify better our present actions. To do this, the relevant information is needed by studying the past events and deeds, reflecting on own experiences, clarifying future goals,

expectations, and intentions, and placing them in the structures and reality of the present (Robertson 2012, 355). After all, the decisions are made in the present stage, but the consequences of actions and decisions are somewhere in the future.

Tuomi (2019) emphasizes the complexity, diversity and processive nature of experiential knowledge and possibilities. At the same time, they affect the person who use the knowledge and experience gained from the past and the present when making future decisions. All in all, the whole human capacity, both the mind and body, seems to be involved in the constructivist experience process.

We have moved away from a society based on the satisfaction of basic needs to one in which social appreciation and self-realization together with personal resilience are becoming increasingly important (Walker et al. 2006). The image that prevailed in the public consciousness in the past, for example, of science as a pure search for truth because of the knowledge itself, has changed. Here, the achieving goals through research and science has become more important than analysing the goals themselves (Von Wright 1989). Thus, science and research have become a key productive force on its own. It can be argued that the relationship between randomly pursued personal goals and what is important to humankind and humanity for the continuation of life has become blurred. We are in a situation where the satisfaction of personal desires is allowed to take place at the expense of the needs of others.

If the features described above are realizing at the same time, we are in a position where gaining social appreciation and realizing oneself by any means and in a very short-term manner easily becomes the basic motive for action at the individual level (Walker et al. 2006). Indeed, it may be that susceptibility to short-term, narcissistic satisfaction of desires increases at the expense of discretionary needs, long-term life management, and planning.

The immediate challenge facing every human being concerning the future is to manage change and being able to live in change. Here, it can be argued that the alienation caused by change can be reduced and change can be managed, however, by developing the ability for more long-term deliberation, which in turn requires the ability to analyse situations and perceive entities and interrelationships beyond the personal interests.

2.2 Pioneer analysis

2.2.1 Pioneer analysis: an approach and a method

Popper (1995) assess that predicting the future is impossible because we cannot, in principle, know in advance what kind of inventions will be made in the future, let alone how these future inventions will affect society and individuals. Popper's views emphasize the openness of society and the importance of the individual. Knowledge is based on experience and increased by questioning: new empirical knowledge can be used to prove existing theories and replace them with new theories. Bold hypotheses are needed that, once proven sustainable, they will help science move forward. Related to this, Gilbert (2016) suggests one of the core ideologies within pioneering to be seeking a problem, not avoiding them. Or moreover, that ideas and problems spin around us looking for a suitable partner to work with (Saarinen 2021).

Intuition researcher Asta Raami (2017, 75) highlights that creatives individuals like forerunners and pioneers tend to see difficulties as a possibility for serendipity: a chance to develop own knowledge, thoughts, to test it, and to reject it if it turns out to be wrong. Besides that, it is most likely an act of stubbornness and dedication to the cause as well: pioneering work needs commitment and thousands of hours of work to fulfil its goals like any other effort for success (Ericsson et al 2006; Ericsson 2008). Here, the moments for meaningful and profound doing must be continuously cherished (Saarinen 2021).

Wilenius points out (2017, 44-48) that the accelerating pace of change, especially during the past 20 years, is welcoming the ability to innovate. Though, developing an appropriate strategy is often not the most critical challenge. Instead, the hardest part is putting the strategy in practise. Overall, our reaction rate for change tends to be too slow (Hiltunen 2013, 38). In futures research, one of the key challenges is to identify emerging issues and problems. Hiltunen (2013) argues that these initial signs of change, weak signals, emerge on the fringes of society and with that, they hold a promise to come true. However, there are some challenges with the weak signals approach: they are phenomena without a history, and with a very uncertain future.

Yet, a broader perspective on future issues is provided by pioneer analysis, which view and observe early adopters of an idea: pioneers who promote the development process of the idea significantly with their action (Heinonen & Karjalainen 2019; Karjalainen &

Heinonen 2018). Pioneer analysis extends from technical innovations and different practices to countries and cultures as well (Heinonen 2013). The aim is to overcome past innovations or practices and head into the direction, which the pioneers themselves find desirable.

Pioneer analysis¹ as a method encapsulates both identifying pioneers and analysing practices and activities to provide future insight (Heinonen & Karjalainen 2019, 62). The selection of pioneers is one of the key aspects of the analysis. As Minkkinen outlines (2020, 29), identifying a pioneer in the field is challenging and it goes easily unnoticed. Further, Heinonen & Karjalainen state (2019, 62) that “*a pioneer determinately and boldly looks for opportunities to drive change*”. However, the most difficult part of the changemaking process is not to produce visions as such but to live them true in the everyday (Hiltunen 2013; Schippers & Ziegler 2019).

Related to this, Loorbach (2010) presents four features of an individual to reach this condition beyond the ordinary: the ability to reach a high level of abstract thinking; the desire to think outside the ordinary; the ability to work in networks and the ability to be open to the innovations. Here, pioneers shift their role from a knowledge-based performer to a creator and a lyricist of totally new perspectives by understanding the role of the big picture, concrete doing and a sense of participation and play (Hiltunen 2013; Wilenius 2017).

2.2.2 Pioneering, creativity and liquidity

It can be argued that there is an undisciplined element in everything manmade. Wildness is the opposite of management and control: it is about taking responsibility for oneself, surrendering and using force at the same time (Blombstedt & Saarinen 1980). The true pioneers must fight their way collective upstream (Kurki 2020; Heinonen & Karjalainen 2019). Sometimes pushing a radical idea forward appears to be a battle against windmills. Though, moderate simplicity appears to be the enemy of reformers as the passion and a true call are missing (Rehn 2018).

¹ Pioneer analysis can be regarded as both an approach and a method. Respectively, a scenario is a method (technique), but it is also a key approach, a theoretical framework for alternatives, and even a worldview: the world as seen as a set of scripts for alternative futures (Heinonen, personal comment to author, February 28, 2021).

Like a pioneer in the biohacking industry Olli Posti states in his interview (2020) that the pioneer “lives in his own reality”, i.e., that a pioneer rejects the obligation to share the collective standards. Consequently, the cornerstones and details in life must be chosen carefully to stay true with the cause. Raami continues (2017, 118) with the topic that so called *propel hats* seem to carry a special agile creative attitude, an imaginative tone, in their doings. Here, the tensions and challenges associated with change seem to be dissolving or being resolved in a surprising way. Schippers and Ziegler (2019) argue that the spirit of purpose driven lifestyle combines personal elements of passion, vocation, mission, and profession. At the same time, the feeling of existence and the desire to reach high level goals are strengthened (Schippers & Ziegler 2019). In this process, cognitive dissonance acts as a positive engine.

Here, it must be acknowledged that the existing social power structures define the limits for creativity: what is considered as desirable thinking and what is not. For example, Foucault (2011) has explored the definition of “madness” as a social issue. The key point is to limit overly abnormal thinking by defining it as disturbing and potentially dangerous. However, there are various forms of abnormality which are considered desirable. Here, the desired outcome of “madness” can be argued to be, for example, an activity that takes place in the way that it is generally accepted, such as start-up companies. Thus, societal power structure is in many ways involved in defining various anomalies and differences, and they are hardly purely choice of the individual him/herself.

Overall, the weaker the development culture, the worse the future success can be predicted (Laaksonen 2020). Experiences and observations are essential part of pioneering changemaking process (Heinonen & Karjalainen 2019). Experiences create enthusiasm, hope and a new stream of development. Learning is guided by new activities, and observations, followed then by insight, and initiatives (Hiltunen 2013, 178). However, the pioneering deeds and acts are, in general, incidental in nature rather than a result of a rigorous development plan. The focus is to create a visible form to something that seems to arise out of nothing (Raami 2017, 118).

The true pioneers seem to be recognizable by the fact that their doings are not understood, and the value of their action is not recognized – at least at the very moment. According to Heinonen and Karjalainen (2019), most pioneers see the world we are living in as an insufficient place to fill the goals and needs set for it. The content of their

approach is probably so strange and unconventional that it is not understood at all by the majority: there is no ready-made frame of reference. Pioneers turn their visions and goals into practice by exercising talent, information, and material they possess. However, hardly ever a completely new idea exists, but it has been fed by countless other people, ideas, inventions, and practices (Raami 2017, 117). These new interfaces and areas of expertise create experimentation which have a special chance to lead directly or indirectly to the future.

The sociologist Bauman (2003) has described the contemporary flexibility and risk-taking tolerance of our living conditions as liquid. According to Bauman, our way of living is in the transition from a solid stage to an era, in which conventional standards are vanished and individuals must be more adaptable in every aspect in their life.

Salonen and Joutsenvirta picture (2020, 86) this change among the human population in the table 1 as “a revolution of values” where material driven values are replaced with meaningfulness and personal development. According to the reviews described above, the lives of most pioneers seem to simulate this state of the future already. Here, emotion, experiences, and experientiality take up space for regularity and predictability.

Table 1. A revolution of values (Salonen & Joutsenvirta 2020, 86).

Material values	Post-material values
Strong authorities	Empowerment of citizens
Order	Self-realization, inclusion
Prioritizing economic growth and living standards	Prioritizing quality of life
Performance	Well-being and universalism
Ownership as a measure of success	A change in the meanings and objects of ownership
Absolute rules and norms	Agile practices and ethics
Predictability and regularity	Emphasizing relevance and purpose
Power	Goodwill

The actions of pioneers appear to be among the first symptoms of a change that may be significant in the future, but which will take time to mature into a more permanent trend in general. These events are difficult to detect than trends because they typically feel ridiculous, incredible, or irrelevant when taking place. Heinonen and Karjalainen sum up the topic and describe pioneering as an act to be the change itself and a possibility to react to the weak signals (2019, 61; 63).

Pioneering is a response to the readymade alternatives set by the society where ideas can run flexibly between concrete implementation possibilities and imagination (Cross 2004; Schön 1988). Pioneers tend not to reject the rules by establishment as such, but pursue something different: free self-expression, creativity and autonomy instead of a norm and surveillance. The power of the individual and intuition are welcomed in particular (Schippers & Ziegler 2019). It can be argued that pioneering is an attitude and process that rebels against ready-made alternatives and lifestyle settings, and simultaneously, it manifests and establishes a norm of its own.

2.3 Self-sufficiency and subsistence economy

Subsistence economy means an economical structure in which all or at least most of the products or elements needed are produced by oneself. This was common in rural areas in Finland until the end of the 19th century (Ikäheimo 1999). Harari sums up (2015) that from a historical perspective, the industrial revolution made possible a dramatic upgrading in the material standard of living and enabled an elite lifestyle for the majority. In turn, this development curve led to dependence on global actors and phenomena.

Probably the most fundamental manifestation of subsistence economy is the pursuit of food self-sufficiency. Independence is deepened by cultivating without ready-made fertilizers, using self-added seed strains, and working without mechanical power (Karosto & Karppinen 2011). However, the concept extends widely beyond primary production. In a fully subsistence economy, everything is produced by own efforts, be it food, clothing, or heating. In practice, this would mean disconnecting from both the electricity and the Internet grid.

The contemporary industrialized society needs extensive social infrastructure to produce food and supplies (Ahokas et al. 2016). Subsistence economy survives on scarce and local natural resources, resulting in fewer global resource struggles (Karosto & Karppinen 2011). Besides food, modern self-sufficiency extends beyond supply and production, to cover fields of communication and design for instance. This is characterized by independent, local action. Here, a decentralized society can be more democratic and less vulnerable to global fluctuations (Karosto & Karppinen 2011; Malinen 2020).

The basic conditions of our lives have been transferred to unknown hands, to parties which we do not know personally (Kovanen & Lapinoja 2014; Klein 2001). Meaning that

we instinctively fail to question the arrangements, the big picture, on which our livelihood depends. The increasingly advanced specialization in the society forms a network of cross-dependencies that are difficult to brake for an individual (Ahokas et al. 2016). In the short term, this can contribute to peace in society, but at the same time it weakens society's ability to make the necessary changes while being a faceless system.

A reduction in the material standard of living seems inevitable in the dawn of the post-fossil era (Salonen & Joutsenvirta 2020; Walker et al. 2006). Privacy, reduced by social media monitoring and the data economy, is likely to challenge more and more individuals to consider their own relationship to the use of technology and to seek opportunities to live outside monitoring (Minkkinen 2020, 96). Maffessol (1996) argues that the methods and perspectives of society that have served humankind well for 200 years have largely come to pass. For this reason, the importance of informal functions, actors and everyday knowledge is emphasised in understanding the current situation and its development processes and forms (Maffessoli 1996, 3-6).

In the market economy realm, the exchange emphasizes vested interest (Malinen 2020; 2021). A decentralized, and self-sufficient society limits itself as the resources are limited naturally. Karosto & Karppinen (2011) argue that subsistence economy is, above all, a ruthless reassessment process of own consumption. Weighting in that what could be done with own efforts instead of buying ready-made things from the store. Here, a drop in the living standard, access to resources, may even go unnoticed by a well-off self-sufficient person, whose sphere of life consists of nonmonetary issues. On the other hand, the money brings visibility and turnover to commodities and, on the current scale, there are some elements like communication resources that the natural economy cannot produce – for now. Subsistence economy, like any field in the society, poses a danger that the alternative will become a new discriminatory force of its own. The goal of self-sufficiency can turn out to be a self-serving circle of values or it can become, as with everything, an instrument of contempt and power. Like Klein (2001) outlines, ownership is a somewhat unsolved dilemma between humans and nature.

Like the documentaries “Omavaraiset” and “Unelmien maatila” (Yle 2020) bring up through their narratives, the self-sufficient person must be willing to face most likely a hard physical workload - that can quickly turn into a rat race itself. Such a change in the lifestyle requires the acquisition of a wide range of skills required: for instance,

information, education, and contacts from different fields of specialists. A rugged personal nature is needed in order to be able to slaughter livestock and cut meat. In addition to that, you must be able to build and repair various tools. And in some point, a humble mind to face the pests taking over the fields. Karosto & Karppinen (2011) describe this aspect in their book about survivalism that the most important thing is to find the right balance between yourself and nature and live a meaningful life with that combination.

According to Lamy (1996), self-sufficiency is an effort to reduce subsidiarity, i.e., to become self-sufficient in the area of choice. Meaning that the dependencies change or exist somewhere beyond the standard settlements. As an example, a community can be self-sufficient, but at the same time it can deny an individual self-sufficiency in the community and become an authoritarian subsistence economy (Karosto & Karppinen 2011).

The self-sufficiency model faces a serious challenge in how it faces the problems posed by the global mass production and technology usage like social media platforms (Ahokas et al. 2016). Here, the focus is set closer. The self-sufficiency model aims to create smaller, “human sized” problems and apply more familiar solutions with that (Karosto & Karppinen 2011; Kovanen & Lapinoja 2014; Lamy 1996). As a basic circumstance, it follows the framework provided by nature, while the technological and industrial approach seeks to control it. Then, the risks associated with solutions are proportional to the size and coverage of the applications concerned.

It can be argued that self-sufficiency means independence, transparency, and self-reliance. In earlier times, this know-how passed from one generation to the next (Ikäheimo 1999). On the path to contemporary self-sufficiency, it is possible to find totally unnormal settlements and novel solutions – while attracting pioneer type of people. This could create personal resilience and societal diversity as do-it-yourself skills have a possibility to increase the personal self-confidence and reduce feelings of fear, especially in times of tension (Raami 2017; Schippers & Ziegler 2019).

3 Research design

3.1 Target group

An important aspect of this study is the delimitation of the pioneer concept, i.e., in practice the criteria for the selection of the appropriate interviewees. As pointed out in a previous section on pioneer analysis, not all anomalous activities can be called as pioneering, but the key idea focusses on the attitude: pioneer tends to create something new and to solve problems that promote disruption.

Heinonen and Karjalainen characterize the pioneer status in the figure 2 by underlining their uniqueness in the population. Further, they introduce the criteria for pioneering (2019, 63) with the definition of “*a pioneer is determinately looking for an opportunity for change*” and she/he is “*a person or thing that precedes the coming or development of someone or something else*”. Kurki (2020, 49-50) underlines pioneers’ active role compared to the randomness of the weak signals as “*...the pioneers are agents with an intentional aim to shape history: to win over previous innovations or practices and shift the development towards a direction that they consider desirable.*”

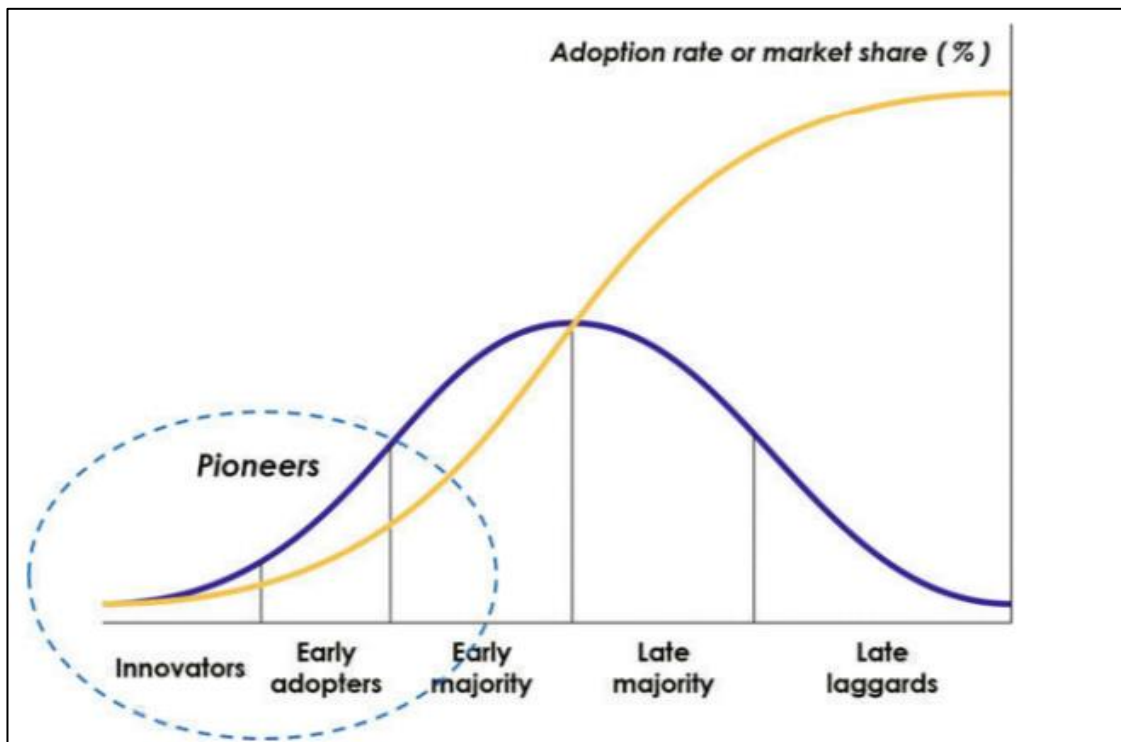


Figure 2. Pioneers by Heinonen & Karjalainen (2019, 64).

The definition of pioneering, as well as weak signals, is not unambiguous: context, relations and perspectives affect interpretation (Ahlqvist & Uotila 2020). Like the figure 2. points out, the top criteria for the selection of pioneer respondents focusses on action and concrete doing by the individual: pioneers consist of both the persons behind the initial idea (innovators) and persons who take the first development step with the novelty (early adopters).

Moreover, this thesis emphasizes the personal and self-sufficient aspect of the pioneering status. The research sample is formed as a discretionary sample, i.e., based on criteria and standard set by the researcher herself (Hirsjärvi & Hurme 2008; Tuomi & Sarajärvi 2009). The target group consists of individuals whose personal lifestyles and personal lives manifest pioneering through their concrete action. These individuals live strongly through their pioneering spirit and carry out some kind of self-sufficient element in their life. Here, those areas cover basic needs of contemporary human life without precise delimitation of the self-sufficiency aspect itself.

In addition to the pioneer definitions described above, the interviewees were selected for the sample based on the following four criteria:

1. there is information or proof of unconventional or non-mainstream experiments delivered by him or her;
2. he or she is generally subject to conflicting attitudes;
3. he or she identifies himself or herself as a pioneer in the field and
4. he or she has an active pioneering status, meaning that he or she is engaged in a pioneering project at the time of the interview.

Otherwise, the demographic background of the interviewee, such as age, gender, and place of residence, was irrelevant in the selection process. However, due to practical implementation, all the interviewees are Finnish, and they are at least 18 years old.

Like Ahlqvist and Uotila state (2020) in their article, a complete objective determination of pioneering is almost impossible, and some sort of bias is always present. Accordingly, the systematic selection criteria implementation described above can be argued to minimize the bias to some extent.

As expected, a wide range of actions had to take place to get suitable interviewees involved (Tuomi & Sarajärvi 2009). Over the course of several months, I asked almost

every person I met: who do you consider to be a pioneer at the moment. My own view of potential candidates, tips and recommendations from acquaintances and fellow students, as well as insights received through the media, compiled a list of names of around 30 people which I started to contact in December 2020.

Although the topic is not sensitive as such, the interview session and the theme required openness: disclosure and an ability to share personal matters. Therefore, it is most likely that the research layout and topic affected the final sample, i.e., who in the end wanted to give the interview and who had the opportunity to share own life story openly - within the fieldwork schedule. Besides that, for the sake of research ethics, it was important that respondents were genuinely excited to participate in the research altogether.

It must be honestly acknowledged that the target group was demanding in its delineation and the required number of respondents was challenging to gather up. Fortunately, I understood to send the inquiry emails to the potential candidates as early as in December 2020, as the data collection time stretched from one month to three months. However, I was not prepared to compromise on any of the original plan and therefore the target group meets fully the pioneering criteria described above. The list of the respondents is attached in the Appendix 1.

3.2 Semi-structured personal interviews

3.2.1 Method

The main part of research material consists of the semi-structured personal interviews to gather information and insight within a small group of experts in the field (Gillham 2000, 62). This qualitative research approach seeks to understand the research object by explaining its use or the reasons for decisions. The interviews are characterized by interaction, not just as a one-sided questioner-respondent counterpart session (Heikkilä 2014, 16). With well-designed and implemented research setup there is an opportunity to seek diverse information and deep understanding of both the pioneer itself and the pioneering phenomenon as such. The respondent population is limited to few cases – total of 11 - but the aim is to analyse them as closely as possible.

To some extent, the interviews could be described as ethnographic interviews as well, as some of the interview sessions were conducted at the pioneers' home or workplace. The

goal of ethnography is to describe, explain and understand a person in the context of their own everyday life. Hämeenaho & Koskinen-Koivisto underline (2014) that ethnography does not necessarily require personal fieldwork as a research approach, but in this case the integration of the material into the cultural environment, time and place, and the data collection situation are central to the research process. Here, it must be acknowledged that the situation and location have somewhat influenced the course of the interviews and the specific questions.

3.2.2 Fieldwork

The data collection process began in January 2021 and the interviews took place between January 18 and March 19, 2021. The interview material, of which I present some excerpts in this dissertation later, consists total of 11 interviews with the chosen pioneers who have all given permission to use their name in the study. All the data have been recorded and transcribed afterwards.

The interviews were conducted mainly face to face, at the homes of the interviewees, which brought a deep sense of personality and liveliness in the situation. Some of the interviews were conducted over the phone due to different geographical locations, some hoped to meet in a cafe. Nevertheless, all the interviews took place in a in a quiet environment, without a feeling of rush. The average duration of the interview was about two hours, ranging from 1.5 hours to 6 hours. For some interviewees, there emerged a need for additional contact and questions after the actual interview session.

As the fieldwork progressed, my understanding of the research field deepened further, so the focus of the questions somewhat shifted to deepening the themes that we mentioned repeatedly during the interviews. Thus, some of the key concepts of my research are more based on the interview data, while others refute more from the theoretical background. This hermeneutic dimension illustrates the ethnography nature of the interviews: my understanding of what is generally meaningful to ask formed partly during the fieldwork, partly based on the literature adopted.

The starting point and agenda of the study were same for all interviewees, but the implementation was tailored to suit each situation accordingly. The interview sessions turned out to be quite lively at times, so I almost never followed strictly the question frame as such. Occasionally, I found that the interviewees had clear expectations of what

I would like them to say. Yet, this is a natural consequence of interpersonal communication to relate the message to the expectations of the interviewer but the need to please must be considered when interpreting the results.

The research literature shed light on understanding of the topic and the objectives of the interviews. During the interview sessions, I relied heavily on the idea of a thematic interview, according to which progressing according to themes is more relevant than individual questions (Hirsjärvi & Hurme 2008; Tuomi & Sarajärvi 2009). Here, it is possible to consider the centrality of the interpretations made by the interviewees and the meanings given to the issues.

Like Gillham (2000) comments, the respondents with a strong personal focus on the subject bring out more and deeper level information than expected in advance or asked during the personal semi-structured interview session. The thematic interview aims to go deep in the conversation, and it aims to consider different interpretations and meanings given to the cause or the topic (Hirsjärvi & Hurme 2008; Gilham 2000). Such a practice provides more flexibility to study lesser-known phenomena as there is room for free speech, although pre-determined themes are sought to be discussed with all subjects.

This is also stated by cultural anthropologist Marttila (2014, 263), who outlines that experience may not actually always be best accessed through the observation of everyday activities, but rather through the personal story told by an individual him/herself. This was evident during these interview sessions as well, but at the same it made the handling of the material challenging: I decided to exclude those parts of the interviews that have not been in any way relevant in the context or that had a strong confidential personal focus in the discussion.

3.2.3 Question themes

The goal of the interviews was to unravel the scheme of things and value patterns that become alive and visible through the pioneering process. During the interviews, the question themes were reviewed in random order though, all themes and their sub-themes were discussed with every respondent. However, the extent and intensity within the themes varied heavily depending on the respondent. The exact concepts or terms were not defined per se, as it was relevant that respondents would give descriptions in their own words and as genuinely as possible. The frame of the interview was designed to

comprehend the big picture of the pioneering: the course and progress of the pioneer path and the underlying aspects affecting it.

The interviews followed the set of (indicative) question themes below, varying it to meet the individual preferences and differences. The full questionnaire translated in English and the original questionnaire in Finnish are attached in the Appendix 2.

- I. The life story
- II. The turning point
- III. The course of everyday life
- IV. Objectives
- V. Sources of inspiration
- VI. The future

3.3 Validity, reliability, and limitations

A key question when assessing the validity of a qualitative study like this thesis lies in the overall competence: whether the study has been thoroughly conducted and whether the results and the conclusions are relevant (Hirsjärvi & Hurme 2001; Kirk & Miller 1986). In this context it means that the reality is not described as such, but the validity aspects appear in the form of credibility and persuasiveness: how well my interpretations correspond to those produced by the subjects and how well I produce these constructs for others to understand. Though, a single study can never produce a complete understanding of the problem. The validity question in a study like this is, in my opinion, about the accuracy of the interpretation, not so much the reporting of things as such.

The consistency of the interview material provides an evidence of a moderately good level of reliability in the study: interviewees brought up similar issues despite the unstructured nature of the interview session. Admittedly, from the point of view of the credibility of the study, it should be noted that the nature and topic of the study may have influenced how the participants responded. For example, in this context, all interviewees appreciated the existence of pioneering and creativity in general and they were most likely prepared to argue accordingly.

One of the key reliability issues is the choice of the interviewees, i.e., the representativeness of the sample (Ruusuvaara et al. 2010). Here, the target group consists of an extremely small subset of the population for which no official statistical sampling

criteria can be found. The biggest motivator and a deal breaker in the sampling process have been my own intuition: which individuals “make my eyebrows rise” and possibly whose ideas are now laughed at. Further, these ideas were enriched, evaluated, and opposed by the assessments of the people around me. In this context, it should be honestly noted that the hand-picked selection of the sample inevitably involved a subjective element that increases the possibility of bias. With these aspects in mind, I argue that a longer fieldwork period would have increased the total amount of respondent and with that, there could have come up more valuable viewpoints to consider. Yet, within this timeframe I managed to get together 11 interviews by the pioneers with the special niche approach.

The research topic itself is quite an abstract in nature and most of its content covers a lot of personal issues which puts the honesty to the test. However, I feel that in this case this was not a problem at all: the respondents were eager to share their personal story and as well as quite sensitive issues with me. On the other hand, there may have been pressure to share hero-stories in this context.

The reliability of the study was enhanced in particular by the testing phase of the questionnaire, careful handling of interview materials, and transparent categorization (Kirk & Miller 1986, 14-21). As a method, the interview survey allows the questions to be refined afterwards if necessary, and for some interviews, I recontacted the interviewee after the actual interview to confirm or specify some responses. Further, the reliability of the analysis and categorization of the interview material was enhanced by the recording of the interviews: it ensured both the full focus during the interview session and complete notes to be utilized afterwards. Kuckartz (2014) points out that the reliability of qualitative research would be enhanced by obtaining the view of another researcher on the same material. Indeed, it would have been valuable to get another researcher’s view especially on the classification of the interview material, but unfortunately there was no possibility for that in this study.

With my knowledge and experience I would argue that it is unlikely that this kind of research set up could give exactly the same result by different researchers. The process and especially the outcome as a form of futures images done by a single person is with no doubt coloured by my personal perceptions, assumptions and opinions and cannot provide a perfectly unbiased picture as such (Hirsjärvi & Hurme 2001, 186-188). Especially

related the futures images I feel that the study approaches the field of art, in which the credibility of the study is to be determined by my ability to follow my own voice and the ability to communicate the desired message forward. Related to this, Van der Steen and van der Duin point out (2012, 490) that in the field of futures research, the quality issues focus primarily on the whole set of the study and the requirements of the research go beyond methodological choices: in particular, how much impact and value the research attain. This is something to be assessed later.

4 Results

4.1 Thematic qualitative analysis and the tree of the pioneering spirit

This chapter presents and summarizes the results of the semi-structured personal interviews. The interview material has been reviewed and categorized with the approach of thematic analysis, which allows the material to be classified into larger entities later if necessary. Basically, in qualitative analysis, the categorising is not just about a phase of a data processing, but the idea is to find something new and undetectable: new structures and conceptualizations to understand human realities (Ruusuvuori et al. 2010, 16). According to the goals and method described in earlier chapters, I find that the thematic classification fits into the context of pioneering, especially as the aim is to bring out wider narratives and worlds of experience. Here, it should be noted that the categorization process inevitably includes the researcher's own interpretation.

The categorization of interview material is primarily based on notes of interview recordings. In practise, this process required several rounds of review and listening to the recordings to clarify the view of the essential aspects and nuances. The focus is set especially on the specific meanings and the quotations that would underlie the categories chosen. During the process, I paid attention to my own interpretation focus and the sensitivity to interpret the issues according to the original tone of the interviews to avoid excessive simplifications of the categories.

The theoretical framework was in some degree taken into account during the analysing phase. There is no ready-made recipe for such an approach, as you must first read and study the theory carefully and then apply it in your own research. Such an analysis is experimental and evolving. Moreover, the research process did not fully follow the traditional linear “fieldwork-analysis-reporting” formula, but the analysis was refined throughout the research process. The framework of the interview was pre-themed, but these themes turned out to be clearly different compared to the categories describing and structuring the actual interview results.

Besides that, I decided to apply a scenario building tool as an additional guidance for the categorisation to get some answers for the research questions of the study and to find a suitable future thinking view to consider. Peter Schwartz proposes (2000) the scenario building process GBN (Global Business Network) as a tool to build useful scenarios.

These include the identification of the focal issues, key factors, driving forces, and the indicators (Schwartz 2000, 241-248) – all valuable aspects in the pioneering process.

With all these considerations in mind, the interview material ended up dividing into 11 categories explaining and characterising pioneering spirit and mindset. Like the figure 3 pictures, together all these themes can be described and visualized as a tree with a root and branches: here, pioneer's spirit stands on a solid foundation with a root and simultaneously it thirsts for light and life with its branches and leaves.

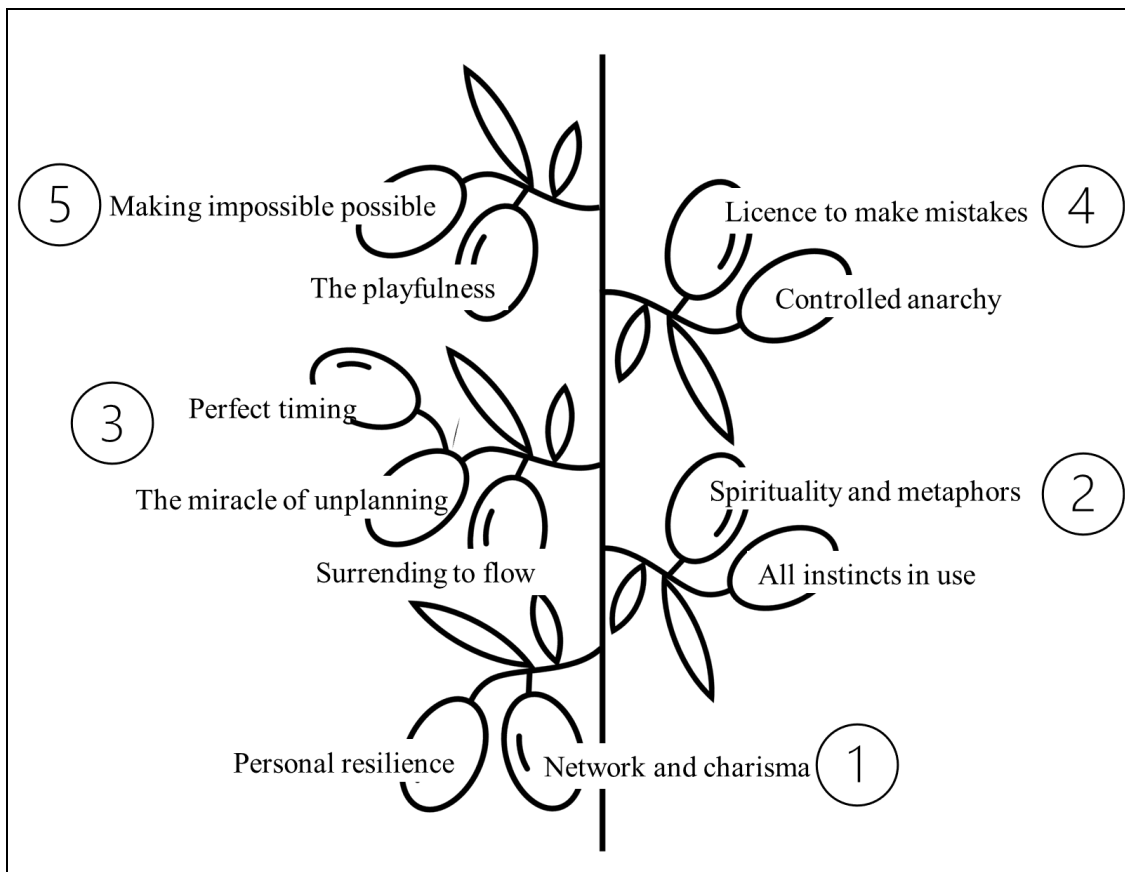


Figure 3. The tree of the pioneering spirit.

Pioneer's *Capacity*, meaning the categories of *Personal resilience* and *Network and charisma*, symbolizes the root and basis of the figure together with the dimension of *Awareness*, i.e., the categories *Spirituality and metaphors* and *All instincts in use*. Further, together, *Capacity* and *Awareness*, the root, could be described as the facilities of the pioneering spirit.

The final categories deepen the essence of the pioneering spirit further. The branch titled as *Carpe diem* summarises the categories of *Perfect timing*, *The miracle of unplanning* and *Surrendering to flow*. This is followed by the set called *Revolution* consisting of the

categories of *Licence to make mistakes* and *Controlled anarchy*. To conclude, the last branch, *Adventure*, with the categories *Making impossible possible* and *the playfulness*, finalizes the tree of the pioneering spirit figure. Together, elements *Carpe diem* and *Adventure* outline the role of the attitude in the pioneering spirit.

All categories are discussed and summarized in more detail in the following chapters 4.2-4.6. The direct quotes, to be mentioned in the chapters with the respondent numbers, are translated from Finnish to English by the author. The full details of the respondents, in the alphabetical order, are attached in the Appendix 1. All interviewees have given permission to use and include their name in the research material context.

4.2 Capacity

4.2.1 Personal resilience

Tolerating failure and imperfections seem to be an inevitable part of the pioneering process. Based on the interview material the balance between self-acceptance and personal development is one of the key elements of a pioneering drive. The appreciation, acceptance, and acknowledgement to own qualities and features seem to increase as the years go by. Besides that, some of the interviewees recognize that illnesses and personal weaknesses have somewhat served as a kind of an impulse, material, and further as a motivation for the pioneer path to begin and develop further. A change in the attitude might turn out to be a gamechanger moment to a success to come.

I have written around two sheets of paper with text by myself during my entire life. [...] I can make an electric motor under these conditions just like that, but in our society, you must have an ability to write to get to school and to a specific position.²

The pioneers point out that personal empowerment and resilience is a result of the challenges faced through the own pioneering journey. Some of the interviewees shared quite personal experiences and memories during the interview, and by far, the greatest need for change has been caused by situations where they have not received right kind of encouragement or approval they would have needed. Though, the pioneers subsequently identified these situations as necessary steps for personal growth and greater internal

² Olen kirjoittanut koko elämässäni noin kaksi paperillista tekstiä. [...] Voin tehdä tästä vaan sähkömoottorin näillä olosuhteilla, mutta meidän yhteiskunnassa pitää osata kirjoittaa, jotta pääsee kouluun ja tiettyyn asemaan. (R1)

balance. In practice, it seems that this inevitable resilience developing phase does not mean returning to a previous state in life but finding a whole new route in life altogether.

My German teacher said: look at that Ponkala boy, he is nothing: so useless that he can be hit with a log on and put out to dry. Failure at school only reinforced my own path: I did technical stuff with even greater enthusiasm.³

Based on the interviews, some degree of pain and anxiety seems to be inevitable part personal transition process: lost relationships, financial distress, loneliness, contempt for others, and standing on the edge of a precipice of giving up. Each of the pioneer interviewed stated that they had failed several times, often so severely that everything has had to start over. Here, a struggle seems to inspire growth.

Four years went by depressed, during which I realized that putting a stop was really important. I got rid of the burden of the past, childhood, and low self-esteem. [...] Because I have had my difficulties, my empathy for others has grown.⁴

Almost all the interviewees identified clear turning points in their pioneering journey, after which it was almost impossible to return to the old style of life. Through that, the inner world of thoughts and values, identity and even behaviour changed. It seems that as the path dependencies in the system and the context are revealed, the importance of the own role becomes clearer, and the passion for self-realization grows significantly.

The internship in China in my twenties was a shock. I lived in the family of the clothing factory owner and went along to the factory with him. I saw a person, the same age as me, sewing all day one same type of seam. [...] Then, the industry had no idea what cheap import actually looks like.⁵

From the resilience perspective, these kinds of challenges seem to provide unique opportunities for growth (and mental health and well-being). Based on the interview material in this journey it is essential to develop the passion to understand the past and comprehend the personal story.

³ Saksan kielen opettaja sanoi: katsokaa tuota Ponkalan poikaa, on niin nolla kuin olla ja voi: halolla vaan päähän ja kuivumaan. Koulussa epäonnistuminen vahvisti vain omaa polkuani: entistä suuremmalla innolla tein teknisiä juttuja. (R2)

⁴ Neljä vuotta meni masentuneena, jolloin ymmärsin, että pysähtyminen oli todella tärkeää. Pääsin irti menneisyyden, lapsuuden ja huonon itsetunnon taakasta. [...] Koska itsellä ollut vaikeuksia, niin empatia muita kohtaan on kasvanut. (R4)

⁵ Harjoittelujakso Kiinassa parikymppisenä oli shokki. Asuin tehtaanomistajan perheessä ja kuljin mukana tehtaalla. Näin kun samanikäinen ihminen ompelee yhtä samanlaista saumaa koko päivän. [...] Alalla ei tiedetty yhtään miltä halpatuonti näyttää. (R3)

4.2.2 Network and charisma

The pioneer respondents turned out to be talkative, social, and approachable as persons. Many of them seem to possess characteristics that can be clearly classified as charismatic qualities. Based on the interviews, the pioneers seem to be rather extrovert and conscientious persons by their nature - with a degree of neurotic and manic characteristics as well.

An active presence, enthusiasm, and multidimensional participation would seem to create an environment around them that others also enjoy. According to the interview material this feature makes them an attractive and interesting partner to work with. The current information age offers unique opportunities to turn ideas into action. Besides that, pioneers are not afraid, nor do they postpone, to contact the people they need. So, a contemporary pioneer seems to be a wizard in networking and contacting.

I love meeting people. I have the ability to encourage and spur on people. I've deliberately built up a network which to contact in several countries.⁶

When co-working, many interviewees emphasized psychological security, i.e., a high level of mutual trust, to be able to enter a mutual state of flow. On the other hand, some of the pioneers preferred to act alone especially at the beginning of the process so that extremely strange and unfinished ideas can flourish or that it is even possible to get started in the process. However, in practice, the pioneer rarely acts completely alone, and the importance of the people and network was underlined through the interviews. Structuring and solving problems requires dialogue, dialogue on the other hand requires listening skills and listening requires awareness and emotional skills. So, in practice, it seems that a pioneer must possess high level communication skills and a genuine call for action to proceed with the vision or the mission.

Influencing means taking responsibility. Linnanjuhlat gowns enabled me to get journalists at the same table to discuss problems concerning the textile industry.⁷

Most of the pioneers interviewed have received publicity at least in some extent. In this context, the publicity was hoped to draw attention to the ignored topics or the nasty

⁶ Rakastan kohdata ihmisiä. Minulla on taito kannustaa ja rohkaista ihmisiä. Olen tietoisesti rakentanut verkostoa, kehen ottaa yhteyksiä eri maissa. (R4)

⁷ Vaikuttaminen on vastuunottoa. Linnanjuhlapukujen tekeminen mahdollisti sen, että sain toimittajat saman pöydän ääreen keskustelemaan tekstiilialan ongelmista. (R3)

defects in the society. The publicity is seen as both an opportunity or as an obligation to keep certain agendas on a public discourse, and the majority regarded pioneer's public role as a mandate to promote the conditions for disruptive solutions to find their place in the society. On the other hand, this puts the communication skills and further the power of provocation to the test. It seems that as the opportunities expand, more emphasis is placed on the morale of the communicator.

Words have a hidden meaning, and it all depends on how you use speech; how well you know how to play the game. People have strong beliefs; they need to be shaken by the right questions. [...] Publicity provides protection to tell the right things. Though, you must have the morality in what to agree through publicity.⁸

4.3 Awareness

4.3.1 Spirituality and metaphors

Some respondents argued that most things are so obvious in our daily lives that they are approached on an almost unconscious level. However, these underlying factors and models influence the worldview, the value system, and ways of thinking. Most pioneers acknowledged that recognizing and manifesting own values is a key to everything. In addition, many of them regarded human life more than a one-time accomplishment. This reduces the fear aspect, leading to an approach where things are done smarter, more consciously and more simply way.

Our society widely encourages towards a vacant life that leads to a heart attack when retiring. I implement my relevance-life in fullest.⁹

Some of the interviewees experience a strong spirituality or the religious guidance as a driving force behind their actions. Spirituality is seen a kind of starting point or basis to understand that there is greater power and wisdom behind this all, and we are here to learn who we really are and what are the things that matter. Here, western science alone is seen as unable approach to answer deeper fundamental questions. Instead of financial success, many pioneers stated that they invest in social and spiritual prosperity and thereby

⁸ Sanoissa on piilotettu merkitys ja kaikki on kiinni siitä, miten käytät puhetta; miten hyvin osaat pelata. Ihmisillä on tiukkoja uskomuksia, niitä pitää horjuttaa oikeilla kysymyksillä. [...] Julkisuus antaa suojan kertoa oikeista asioista. Sulla pitää kuitenkin olla moraali mihin suostuu julkisuuden kautta. (R9)

⁹ Yhteiskunta kannustaa yleisesti onttoon elämään, joka johtaa eläkkeelle siirryttäessä sydänkohtaukseen. Toteutan täysillä merkityselämäni. (R8)

associate themselves as part of something greater. This kind of infinity seems to provide a massive amount of possibilities as well as a strong call to act.

I was an atheist when I was younger, which took away the joy of life. Faith has given me a meaning: human life itself is extremely significant. What if there is a higher power from which acts as a starting point.¹⁰

Some pioneers state that the existence of a mystical world liberates the creation of own reality to be based somewhat on the destiny – which further reinforces following the own voice. Hence, all moments in life, good and bad, are seen as necessary elements for the future. It seems that as the personal awareness development rate increases, so does the desire and calling to reduce general suffering in the society as well. Here, the essential is to reach out for something that does not yet exist. Then the personal resilience changes into a personal transformation process.

The world has its own plan, in which we are used as chessmen, it is useless to fight against it. I have been led to this route: I'm good in entertaining.¹¹

A non-dualistic approach is the only possible one if you want to live a truly happy life. This is when strange coincidences start to happen to you, you become sensitive to different things, you want to do things differently.¹²

4.3.1 All the instincts in use

The respondents underlined the relation to outside world by stating that their goal is not that much to make their dreams come true but rather to reflect their thoughts in relation to this world. Here, intuition plays a significant role by being a contact to internal signals that warn, knock and prompt that now is the time to act. Sometimes the signals are even external and physical, which may appear as clues and repetitive phenomena to wake up and help to make right choices.

There have been no more than a couple of these cases in my life concerning significant insights ... as if someone behind me had asked the right question.¹³

¹⁰ Olin nuorempana ateisti, mikä vei elämän ilon. Usko on antanut merkityksen: ihmiselämä itsessään on äärimmäisen merkittävä. Entä jos on olemassa korkeampi voima, josta voi lähteä liikkeelle. (R4)

¹¹ Maailmalla on oma pläni, jossa meitä käytetään shakkinappuloina, turha taistella vastaan. Minut on johdatettu tälle reitille: olen hyvä viihdyttämään. (R9)

¹² Non-dualistinen lähestymistapa on ainoa mahdollinen, jos haluat elää oikeasti onnellista elämää. Tällöin alkaa tapahtumaan kummallisia sattumuksia, tulet herkäksi eri asioille, haluat tehdä asioita eri tavalla. (R11)

¹³ Näitä tapauksia ei ole ollut elämässäni kuin pari merkittäviin oivalluksiin liittyen... ihan kuin joku takanani olisi kysynyt oikean kysymyksen. (R2)

Most interviewees described themselves as highly sensitive individuals with the ability to capture the strange and fleeting insight from the subconscious part of the mind. Further, this reinforces practises beyond everyday reality, experiences of inclusion, and compassionate association with human and non-human reality. Some respondents concluded this by commenting that they actively seek to connect with their hidden consciousness and dare to explore both its destructive and creative properties. It can be said that the subconscious part of the mind has become a great partner for the pioneering spirit: the impulses seem to point towards the future by anticipating and creating thoughts – and further actions. With age and experience, the individual seems to become more sensitive to these signals and the skill to distinguish the useful ideas from bad ones develops further.

One morning the voice said: combine spruce buds and lingonberry.¹⁴

4.4 Carpe diem

4.4.1 Perfect timing

It seems that behind every pioneering success there is a story about a person who goes out with a shovel and begins digging when everyone else are just talking about it. But it is not enough that the idea is good: the implementation must take place at the right time. Then again, it is not so much a question of gaining enough supporters or popularity, but of all the possibilities to go on with the idea and making it real.

2012 was my momentum: the world was open to the concept; I had relevant know-how; websites could be easily managed; earning logic worked; I had relevant things to say, and I had the audience.¹⁵

What was impossible 10 years ago might be perfect in 2025. Timing skills require both the awareness of the position and context and personal courage. This might mean, for example, reducing urgency or, on the other hand, speeding up the development progress further. Even the small changes can have a significant impact on how well the ideas are welcomed, but also on how the own mission or career succeed in taking place in general.

¹⁴ Yhtenä aamuna ääni sanoi: yhdistä kuusenkerkkä ja puolukka. (R8)

¹⁵ 2012 oli mun momentum: maailma oli vastaanottavainen, itsellä oli tietotaitoa; nettisivuja pystyi hallinnoimaan helposti; ansaintalogiikka kunnossa; oli relevanttia sanottavaa ja oli yleisö. (R3)

I have contributed some stuff for 30 years, but they haven't become popular until now. [...] Timing is more important than what is actually being done.¹⁶

4.4.2 The miracle of unplanning

Most interviewees highlight that they still do not know what they are going to do when they get old. There is little need for predictability in general or it is avoided all in all. However, the pioneer is not a prisoner of the present moment, but instead of that there is room to play with completely different worlds and implementations. Indeed, one of the most important lessons from pioneers underlies the unplanned nature of the existence: to live without a calendar, and to seize the moment. It seems that serendipity somewhat favours the unprepared mind.

When I come up with an idea, I'll plan it for maybe a few minutes. [...] Two months from now, I have nothing on the calendar. [...] I like to do stuff on an understandable time scale.”¹⁷

None of the pioneers commented that they have sharp and measurable goals, especially placed in a numerical form, but instead, the future is approached more holistically. Here, some respondents stated that the most valuable things are impossible to measure and while many things are now feasible, especially most of the corporate level innovation process is wasted mainly on figuring out how to make money with it. In practice, it seems that preferring systems instead of tactic goals leads to a selection of projects and habits that may seem inconsistent outside, but which create skills or circumstances transferable elsewhere later. In other words, the pioneers intuitively choose for themselves a long-term rather than a short-term time span in their doings.

However, pioneer's number one tool gathers around notetaking. Only those who memorize their ideas can also do something with them. So, based on the interviews, the pioneering existence is a pendulum movement between disintegrating and assembling thinking: an appropriate mixture of energetic and goal-oriented doing and disruptive peculiarities.

¹⁶ Joihinkin hommiin oon tehnyt asioita jo 30 vuotta, mutta ne tulevat vasta nyt pintaan. Ajoitus on tärkeämpää kuin se mitä tehdään. (R8)

¹⁷ Kun mun tulee jokin idea, niin mä suunnittelen sitä ehkä muutaman minuutin. [...] Kahden kuukauden päästä mulla ei oo kalenterissa mitään. [...] Tykkään tehdä juttuja ymmärrettävällä aikaskaalalla. (R5)

4.4.3 Surrendering to flow

According to the respondents, there is no single formula for inventing and implementing revolutionary ideas, but often they appear through the most diverse chains of association. Most interviewees describe their life as a series of coincidences that can accommodate all sorts of things - including successes. Pioneer activity seems to be driven by a curiosity and a tolerance of continuous incompleteness. The most important thing lies in the ability to surrender to the various events and encounters in life without any significant prior expectations. Yet, in the absence of optimization, completely new approaches emerge, and truly radical new openings are possible to take place. In other words, intuition-driven lifestyle seems to lead to good coincidences.

Creating ideas takes place through the strengthening of own inner world processes. If you really want to be creative, then you must drop the ego out of the process and just be present in the universe. You just have to be brave enough and surrender to the emptiness.¹⁸

On a practical level, pioneers underline the importance of the flow by minimizing interruptions. Due to the unique nature of their action, everything crystallizes into the very moment. A strong presence and a connection to the project at hands makes it all quite personal and time consuming since diving ingeniously and deeply into an interesting topic does not happen during short breaks in the middle of a busy day. It happens when there is nothing to worry about for a moment and that there is feeling of unlimited time to play with an interesting subject, while forgetting the existence of a clock and a calendar.

I have no visions, there is only this moment. I like to have fun, do what feels right and how the world could become a better place. It is difficult to verify the progress of things afterwards. When you get to the flow, things just start to happen.¹⁹

In the strong self-realization process, the idea must be allowed to linger without any external stimuli. The interviews emphasize the pioneers' need to be with their thoughts: the whistling of ideas is not to be silenced but, on the contrary, clarified through occasional asceticism, wherein it is possible to reflect own thoughts and steps further. However, most pioneers do not want to stay at the level of ideas and dreams alone. The

¹⁸Ideointi tapahtuu sisäisen maailman prosessien vahvistamisen kautta. Jos oikeasti haluat olla luova, niin ego pitää tiputtaa pois ja olla vain läsnä universumissa. Pitää vain uskaltaa antautua tyhjyydelle. (R11)

¹⁹Ei mulla ole visioita, on vaan tää hetki. Pidän hauskaa, teen mikä tuntuu oikealta ja miten maailmasta voisi tulla parempi. Asioiden etenemistä on vaikea todentaa jälkikäteen. Kun pääsee flowhun, niin asioita vaan tapahtuu. (R9)

link to the real world is regarded as extremely relevant element in the process: it is not rewarding enough to serve the planning phase or a research paper alone. The perfect set seems to take place when the own idea is combined with something concrete and interesting serving both the own interest and common good.

Dumbing opened my eyes to a huge amount of surplus food. I initially thought I would be a researcher, but I want to implement things. The research work is too easily filed in the articles.²⁰

4.5 Revolution

4.5.1 License to make mistakes

Most interviewees stated that they have developed a high tolerance for making mistakes simply because mistakes teach more than successes. Pioneering spirit manifests itself in the shape of curiosity to see, experience and feel something totally new: when nothing is certain, then anything is possible. Some of them described this as a need to surround themselves with things they fear or even hate. The ability to create new seems to somewhat depend on the tolerance to withstand shame or guilt: to go beyond judgement and fear. On the other hand, some of the respondents stated that the current inflexible and security-oriented society provides an opportunity for the fearless individual to shine and stand out.

There is nothing more terrible in our society than making a mistake. [...] It's actually a valuable viewpoint if an error emerges. [...] People who spend their time on something new are considered funny.²¹

Many of the interviewees deepened the understanding of the nature of pioneering by describing that their courage is a synthesis of all that has been experienced, and that reality is somewhat the result of their internal perceptions and beliefs. So, everything can be changed in a short moment if the own inner world accepts and change with it accordingly. In this case, the significance of own thoughts and their role as a generator of the future must be recognized. This underlies pioneers' capacity to broaden their perspective, change the attitude towards a change, and increase the commitment to the actions needed

²⁰ Dyykkays avasi silmät ylijäämäruoan valtavalle määrälle. Ajattelin alun perin, että olisin tutkija, mutta haluan jalkauttaa asioita. Tutkimustyö jää artikkeleihin. (R7)

²¹ Mikään ei ole niin kauhea asia meidän yhteiskunnassa kuin tehdä virhe. [...] Se on oikeastaan näköalapaikka, jos tulee virhe. [...] Sitä pidetään hassuna ihmisiä, jotka käyttävät aikaansa uuteen. (R2)

to be done. This way the change does not appear to be an overwhelming force, but a catalyst which can be affected.

We have spiritual forces that are not yet known. Everything is up to you. [...] I nerve myself to face the next steps, fear is a good thing. You don't know your potential until you try. [...] Everything can change in an instant moment: a person can change in a year more than in ten years' time.²²

Based on the interviews, pioneer type of learning requires cognitive capacity driven by a high level of internal motivation. Some of the pioneers stated that they learn best when their need for autonomy, performance as well as the need for dialogue and community are adequately met. Identifying own strengths encourages to bring up own excellences in the surface. And further: believing in own skills seems to increase the chance of overcoming own limitations.

4.5.2 Controlled anarchy

Instead of ready-made alternatives, the pioneers prefer to invent their own business and way of living. Some of the respondents stated outright that they do not share mainstream values and avoid institutionalized, culturally rooted ways of living cemented by economic power and established habits: the best and most unique things cannot be controlled. Further, some of the pioneers commented that they want to cherish their agile and somewhat anarchistic approach to the very end.

Together, we should resist the power of corporations and extreme nationalism. To create a third option. [...] You may consider me insane, but I would like to establish my own state in the Spanish Sahara.²³

The basic nature of a pioneer could be described as positively reckless: even though the common norms and practices are understood as such, the rules are not totally obeyed. With that, pioneers take a full responsibility for their choices as they are not outsourced to parents, society, mainstream media, religion, or popular culture. There is no reason to blame anyone once the choices are genuinely your own. In practice however, many of the limitations act as tools or as a valuable viewpoint to consider, for example, how to achieve

²² Meissä on sellaisia henkisiä voimia, joista ei vielä tiedetä. Kaikki on omasta päästä kiinni. [...] Kerään rohkeutta kohdata seuraavia juttuja, pelko on hyvä juttu. Ei sitä tiedä mitä potentiaalia on, ennen kuin kokeilee. [...] Kaikki voi muuttua vaikka yhdessä vuodessa: ihminen voi muuttua vuodessa enemmän kuin kymmenessä. (R9)

²³ Meidän pitäisi yhdessä vastustaa korporatioiden ja äärinationalismin valtaa. Luoda kolmas vaihtoehto. [...] Saatat pitää hulluna, mutta haluaisin perustaa oman valtion Espanjan Saharaan. (R4)

the greatest possible change with the smallest possible budget. Based on the interviews, the pioneers generally challenge the capitalistic business philosophy aimed at maximizing financial performance. It is mostly replaced by goals of human well-being and social impact.

In most cases, things should be done rather than not be done at all. [...] We lack opportunities to do things in a loose way: social control is tough; the rules must be obeyed. I'm not terribly patient, I want to see change happen faster and easier than it is normal.²⁴

Pioneers are doing or targeting to do something that does not exist yet. Some of the interviewees described this situation as trusting own instincts and following this path with no matter what. A pioneer is indeed a risk taker, but the biggest risk seems to be true honesty to himself or herself. Meaning that the desire for change replaces the need to please and obey the authorities or sacred laws.

The system benefits from the need for confrontation. I do what I do, and I genuinely don't care what others think of me. [...] I have always been censored throughout my career. Censorship only motivates me, there are always ways to find new channels.²⁵

One of the key questions of pioneering seems to be how to nurture the sense of purpose. To cherish own courage to lose control and possible to fail. To find a right balance, pioneers seem to look for a more systemic approach when combining norms and their doings.

One aspect is fear, we are hindered by fear: what the neighbour, the wife, the dog says. We are not allowed to talk about anything other than what the biggest player is talking about. But when you control too much, people lose their motivation.²⁶

Sometimes you just need that first fool who goes to a snowfall with 1.5 feet of snow. [...] I am not extremely good at anything specific, but good enough

²⁴ Useimmiten asioita kannattaa tehdä kuin jättää tekemättä. [...] Meiltä puuttuu kevyen tekemisen mahdollisuudet: sosiaalinen kontrolli on kova, pitää totella sääntöjä. En oo kauhean kärsivällinen, haluan nähdä muutoksen toteutuvan totuttua nopeammin ja kevyemmin. (R6)

²⁵ Järjestelmä hyödyntää vastakkainasettelun tarvetta. Teen mitä teen ja ihan sama mitä muut on mieltä. [...] Mua on aina sensuroitu läpi mun uran. Sensuuri vaan motivoi, aina löytyy keinot uusille kanaville. (R9)

²⁶ Yksi näkökulma on pelko, meitä estää pelko: mitä naapuri, muija, koira sanoo. Meillä ei saa puhua muuta kuin sitä kieltä mitä isoin toimija puhuu. Silloin kun hallitaan liikaa, niin jengiltä menee motivaatio. (R10)

in many things: I have a 360-degree view for the world, not like an engineer who have a 0.1-degree view on things.²⁷

Most of the interviewees describe their learning process in a way that it happens simply through work and practice. Here, some pioneers state that, from the point of view of routines and rituals, it does not matter much what is improved as such as long as the continuous improvement takes place. This is because things seem to deteriorate if they are not maintained and developed to some extent. This, in turn, in the opinion of some respondents, has partly led to the fact that, concerning at least some projects, the development work itself is more relevant in the long run than the day-to-day work.

I hold on things that keep bothering me. Obvious problems do not interest me that much, but the deeper levels of the problems motivate... which I want to develop further and get my hands into.²⁸

4.6 Adventure

4.6.1 Making impossible possible

Interviewees describe that most of their activities are based on testing and iteration process. In an everchanging environment, the best way to proceed is to do small experiments, learn from them and develop the process further. This way, the relevance, own capacity, and the direction of action is shaped in proportion to the need.

Pioneer's playful mind can handle challenges well and come up with creative solutions, but enough time must be given to development, problem solving and learning process as such. Pioneers allow themselves to get excited and develop a passion for their cause. It seems that building a desirable future requires a shift from confrontation to asking bigger questions.

Everyone has an opinion about food, but the doers are missing. [...] I might even be too eager to do stuff and sometimes I am paying a price for it. However, there are certain things you can't stop doing, you just feel it.²⁹

²⁷ Joskus vaan tarvitaan se yksi tyhmä, joka menee lumihankeen, jossa on 1,5 metriä lunta. [...] En ole missään erityisen hyvä, mutta riittävän hyvä monessa asiassa: tarkastelen maailmaa 360 astetta, eikä kuten insinööri joka tarkastelee maailmaa 0,1 astetta. (R4)

²⁸ Tartun asioihin, jotka jäävät vaivaamaan mua. Ilmiselvät ongelmat eivät niinkään kiinnosta, vaan ongelmien syvemmät tasot motivoivat... joiden kehittämiseen haluan päästä käsiksi. (R3)

²⁹ Kaikilla on mielipide ruoasta, tekijät kuitenkin puuttuvat. [...] Mä oon jopa liian innokas tekemään ja joudun välillä maksamaan hintaa sen takia. Jotain juttuja ei kyllä voi jarruttaa, ne vaan haistaa. (R10)

The pioneers interviewed are committed to find ultimate solutions to their problems - even for decades. A lot of time and research is spent simply on understanding the current state and the problem. And when the problem is properly understood, the solutions often appear obvious.

I was a sheet metal smith in Vaisala, where they let me make prototypes. They found that I like difficult projects, that's when I started to glow! A proper meter sensor had to be made, which the graduated engineers had not succeeded in developing. The department head told me: you like that, others are disgusted by it if they don't know what to do. [...] I am a professional inventor: I'm used to ask questions. Our school does not teach us to ask questions, but the questions are made by the teacher alone. Adults need to learn to ask cunning questions.³⁰

Pioneers seem to have at least one common factor, and that is the respect and implementation of their own vision - in the present moment. In practice, this means the right balance between everyday accomplishments and an adventure. Without creative ambition, there will be no development process taking place. Based on the interview material, pioneers tend to be especially excellent in balancing between the possible and the impossible outcome: how creativity is put into practice and concreteness.

I really want to be part in solving these problems, not to produce any greenwashing. For me, urban art and design is a way to make things visible and a way to have conversations with the residents.³¹

Some of the respondents state that they get extra motivation by standing at the forefront of the development and dealing with so ordinary things that there is not even scientific research conducted on them yet. Similarly, it is easier to live with disappointments when you know you have done your best with something that does not even exist. Though, experience raises the standard for innovation and the level of requirements seems to grow with the imagination.

³⁰ Olin ohutlevyseppänä Vaisalassa, jossa antoivat minun tehdä prototyyppejä. Huomasivat, että tykkään vaikeista projekteista, silloin aloin hehkumaan! Piti saada aikaiseksi sopiva mittarianturi, jossa diplomi-insinöörit eivät olleet onnistuneet. Osastonjohtaja sanoi minulle: sinä tykkäät sellaisesta, muita se inhottaa, jos he eivät tiedä mitä tehdä. [...] Minulla on keksimisen ammattitaito: olen tottunut tekemään kysymyksiä. Meidän koulu ei opeta tekemään kysymyksiä, vaan kysymykset tekee opettaja. Aikuisten on opittava tekemään ovelia kysymyksiä. (R2)

³¹ Haluan olla oikeasti ratkomassa näitä ongelmia, en tuottaa viherpesua. Kaupunkitaide on minulle keino tehdä asioita näkyväksi ja keskustella ihmisten kanssa. (R6)

Once we lived in a pit and now it is thought that this is the perfect version of a house. I want to simulate a swallow's nest, to forget completely the current buildings. Construction is not complete even if a modern man thinks so!³²

4.6.2 The playfulness

Interviewees described that learning often takes place through inspiration: getting excited about something and wanting to know more. In this case, the information emerges in the experimental form. Characteristics of such activities are fun, spontaneity, and interactivity. What is done is guided by the absolute value of the activity itself – not by external factors. Pioneers prefer excitement instead of the comfortable: the desire for adventure and playfulness lead to a high degree of adaptability and encountering situations in a genuinely positive and open-minded way. There is an opportunity to move between the worlds of reality and imagined, comprehensible and incomprehensible, as well as yesterday, present and future through imagination and creative playfulness.

It doesn't matter what you do as long as it's relevant in your own sphere. In that case, working turns out to be a playful act, a pure joy without unnecessary squeezing.³³

Pioneers have realized that it is pointless to expect others to change, but the change starts with own actions. Based on the interviews, the pioneers tend to reinterpret and modify the situations to make them more entertaining or less stressful. Here, the over optimization is missing, and the requirement of normality is bypassed. Playfulness manifests as enthusiasm and an ability to make observations, change perspectives, and make boring activities more interesting.

There can be so many types of adventure. After World War II, there were not that much new things available: the instructions in hobby books had to be modified quite a bit to succeed. I noticed that there was no point in following the instructions precisely... Once I even tried to make a flying saucer, nothing came out of it, but for sure, it was an adventure.³⁴

³² Aikanaan asuttiin maakuopassa ja nyt kuvitellaan että tämä on nyt se oikea talo. Haluan jäljitellä pääskyn pesää, unohdetaan kokonaan tämänhetkiset rakennukset. Rakentaminen ei ole valmis vaikka nykyyhminen niin luulee! (R1)

³³ Ei ole niin merkitystä mitä tekee, kunhan se on omassa sfäärissä merkityksellistä. Tällöin tekeminen on leikillistä, puhdasta iloa ilman turhaa puristamista. (R11)

³⁴ Seikkailua voi olla niin monenlaista. Toisen maailmansodan jälkeen ei ollut juurikaan tavaraa uutena saatavilla: harrastekirjojen ohjeita piti muokata aika paljon onnistuakseen. Huomasin, että eihän siinä ole mitään mieltä tehdä tarkasti ohjeiden mukaan... Kerran kokeilin tehdä lentävän lautasta, ei siitä mitään tullut, mutta olipahan seikkailu. (R2)

Most of the respondents argued that by focusing on doing concrete stuff, you prepare yourself for something that might be expected to happen in the future. Here, the future is created piece by piece. So, it is essential to stay active regardless of the possible prospects. One thing usually leads to another, and when you systematically try different things, completely new alternatives might be revealed. It can be said that to some extent: the amount of work and try-outs replaces the quality.

The role of a forerunner is to keep the shield high enough. The stone is thrown from the left and right plus from an angle that you can't even guess.³⁵

When motivation comes from within, the producing phase turns out to be a reward as such, and there is no need to target something specific – nor to postpone the progress further. Too much optimization might drive to a point where the success is more important than the trying. Pioneers acknowledge that it is more important to have fun than to achieve something great and imaginatively invents ways to support own creativity, enthusiasm, and playfulness.

I've played all my life. Once I switched a fancy Audi to an excavator. I didn't know how it worked, I just jumped at the wheel. As a child, I paid to swirl in Linnanmäki, now people paid me to spin around on an excavator in their yard.³⁶

³⁵ Edelläkävijän rooli on olla suoja ylhäällä. Kiveä tulee vasemmalta ja oikealta plus sellasesta kulmasta että ei arvaa. (R10)

³⁶ Koko ikäni oon leikkinyt. Kerran vaihdoin hienon palkinto-Audin kaivinkoneeseen. En tiennyt miten kaivinkone toimii, hyppäsin rattiin. Lapsena maksoin Linnanmäellä pyörimisestä, nyt ihmiset maksoi mulle siitä, että sain pyöriä kaivinkoneella niiden pihalla. (R1)

5 The analysis

5.1 Methods of data analysis

5.1.1 Respondent specific analysis

The table 2 presents an additional analysis to review the categories by a respondent to clarify the results further and to find possible “blind spots”: whether there are categories in the interview material where respondents’ views might differ. Here, based on the relistening of the interview recordings, the categories were rated according to how significant they are to the respondent concerned. Further, the data was classified on a scale of 1 to 4 according to its significance, where 1 means insignificant aspect and 4 means significant aspect. In addition to the numbers, colour coding has been set to facilitate interpretation further.

Table 2. The respondent specific analysis.

Respondent number	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11
CAPACITY											
Personal resilience	4	4	4	4	3	3	3	3	3	4	2
Network and charisma	4	3	4	4	4	3	4	4	4	3	3
AWARENESS											
Spirituality and metaphors	2	4	1	4	1	1	1	4	4	1	4
All instincts in use	3	4	2	3	3	1	2	4	4	2	4
CARPE DIEM											
Perfect timing	4		4	3	4	3	4	4	4	3	4
The miracle of unplanning	3	2	3	3	4	3	2	2	4	2	3
Surrendering to flow	3	2	3	3	4	4	3	3	4	1	3
REVOLUTION											
Licence to make mistakes	2	4	2	4	3	4	3	3	3	2	3
Controlled anarchy	1	3	1	4	3	4	4	3	4	3	2
ADVENTURE											
Making impossible possible	4	4	4	4	4	4	4	4	3	4	4
The playfulness	4	4	3	3	4	3	4	3	4	3	3

4 = Significant aspect

3

2

1 = Unsignificant aspect



Though, the categories have been compiled on the basis of interviews, so it was assumed that there would not be any significant differences between respondents - and for the most

part, this is the case. However, there are some differences especially concerning the category of *Spirituality and metaphors*: for some respondents this feature stands out as a significant resource while for some it is of little importance. Views also differ to some degree for categories *All instincts in use* and *Controlled Anarchy*. These are all characteristics which can be argued to possess a strong personal focus and agenda. Overall, it can be summed up that, in general, the categories describe pioneering spirit as such, but some individual differences of opinion can be found.

5.1.2 Futures tables

Giddens states (1991) that the future is open to people as a limitless set of possible actions and choices. Although our day-to-day operations are based in many respects on the assumption that the world is permanent and unchanging, the accelerating pace of change affects our choices and values, nevertheless. There are several possible futures, and they can be identified in a structured way. A futures table is a method by which different development paths and options can be concretely identified.

Seppälä (1984) describes the futures table as a special tool for building the desired future, which can be used to rationally structure the future development options of both the external and internal operating environment. The alternatives produced by the method can be used as such or as a base or starting point for futures images and scenarios to be processed next (Seppälä 1984; Rubin 2014). Related to this, Seppälä adds (1984) that, while futures table might seem to be a rather simple and effective approach, compiling a one requires a lot of substantive expertise both in the object under study and in the operating environment.

Heinonen (2021) clarifies further that in the futures table, the variables often get the value “increase” or “decrease”, but the values of the scale can be defined to be almost anything. Yet, the change of direction should be considered variable-by-variable and create the alternatives accordingly. Here, the variables in the futures table analysis are tailored to match each category while maximizing the potential for different development paths. Concerning the analysis of this research, in the futures table analysis pictured in the table 3, the variables describe society’s imagined attitude toward the particular attribute, i.e., how the feature is valued by the society. The variables are selected after several iteration steps to respect the possibility of disruption.

The basic principle of the futures table is to form different combinations between the factors placed on the vertical axis and the variables placed on the horizontal axis. Like the table 3 describes, in this analysis, the actual research attributes, meaning the categories of 11 pioneering elements based on the interview data, are set vertically and variables describing the direction or depth of the change are placed on the horizontal axis.

Table 3. The futures table applied in the analysis.

CATEGORIES	VARIABLES		
CAPACITY			
Personal resilience	Key resource	Neutral	Irrelevant
Network and charisma	Full transparency	Moderate level of transparency	Tight bubbles
AWARENESS			
Spirituality and metaphors	Key resource	Neutral	Demonized
All instincts in use	Mental sense focus	Physical sense focus	Extended with technology
CARPE DIEM			
Perfect timing	Key resource	Neutral	Irrelevant
The miracle of unplanning	Supported	Accepted	Impossible
Surrendering to flow	Key resource	Neutral	Despised
REVOLUTION			
Licence to make mistakes	Key resource	Possible for some	Not accepted
Controlled anarchy	Encouraged limitedly	Neutral	Demonized
ADVENTURE			
Making impossible possible	Possible for everyone	Possible for some	Controlled by the institutions
The playfulness	Key resource	Neutral	Demonized

It can be argued that this approach emphasizes the choices of different actors or players and the possibility to prepare for different futures (Rubin, 2014). In addition to that, the futures table contains information about the elements that lead to the state of the future. Here, in my opinion, conducting self-evident status quo combinations is somewhat pointless and the effort is better to focus on trying to conduct combinations that not only differ from each other but support the possibility of disruption as well.

5.1.3 Futures images

The future of society is conditioned by the past, yet in many respects remaining open (Amara 1981; Bell 1997a; Wilenius 2017). All phenomena have their own developmental cycle from the emergence, growth, and maturation of the phenomenon to either decline and possibly cessation or, through renewal, towards survival and possibly new growth (Heinonen & Karjalainen 2019; Wilenius 2017). Development may proceed in a particular direction or disperse into parallel paths: development can take place in the form of gradual adaptation or as a rapid leap into a new state (Blinnika 1982; Gleick 1988).

However, the future holds a promise of several alternative development paths and outcomes affected by the person's own images of the future.

The futures image can be described as a vision for the future which captures both the present moment and the past events (van der Helm 2009; Rubin 2014). Here, the futures images aim to contain intuitive or visionary material, in which case they do not suffer from the bias caused by initial assumptions and path dependencies, i.e., only from the consideration of alternatives close to the current situation (van der Helm 2009). Then, it can be argued that futures images influence the decisions and choices made both at the individual and societal level and, both consciously and unconsciously. And further, through that process, futures images affect both the quality and the content of the futures.

One of the aims of this study is to crystallize the ideas behind the pioneering phenomena with the help of the futures images. These images have been fixed around the year 2100 and like stated, futures images have been inspired by the whole research material set concerned. Thus, the possible future presented by the futures images concerned contains information about the outcome of the pioneering spirit.

Futures images are traditionally classified into probable (what will happen), possible (what could happen), preferred (what should happen) futures (Amara 1981) or utopian and dystopian futures (Bell 1997a; Rubin 2014) according to the desirable effects on future outcomes. In which case, the classification assesses the significance of the futures image and attractiveness of it. The futures images of this thesis can be argued to represent a both utopian and possible futures images – though, depending on the perspective. With this approach, I also want to highlight the role and potential of the futures image as an initiator of debate that justifies the need for change.

5.2 “Pioneering-generalist”

5.2.1 The futures table

The “Pioneering-generalist” futures table analysis, pictured in the table 4, brings together a combination of characteristics that emphasize, above all, a strong individual, and the projectivity nature of the society in general. At the heart of it all is the individual’s free choice and its outcome. Here, the societal development is under two competing paradigms: on the other hand, the society rewards for the promotion of disruption, but an

individual takes the full risk. In this case, it can be argued that the tolerance for making mistakes stands high and majority prefers to focus on nurturing own niche skills and know-how.

Table 4. The futures table: "Pioneering-generalist".

CATEGORIES	VARIABLES		
CAPACITY			
Personal resilience	Key resource	Neutral	Irrelevant
Network and charisma	Full transparency	Moderate level of transparency	Tight bubbles
AWARENESS			
Spirituality and metaphors	Key resource	Neutral	Demonized
All instincts in use	Mental sense focus	Physical sense focus	Extended with technology
CARPE DIEM			
Perfect timing	Key resource	Neutral	Irrelevant
The miracle of unplanning	Supported	Accepted	Impossible
Surrendering to flow	Key resource	Neutral	Despised
REVOLUTION			
Licence to make mistakes	Key resource	Possible for some	Not accepted
Controlled anarchy	Encouraged limitedly	Neutral	Demonized
ADVENTURE			
Making impossible possible	Possible for everyone	Possible for some	Controlled by the institutions
The playfulness	Key resource	Neutral	Demonized

In this realm, the individual might be expected to act both independently and responsibly. As the possibilities for choices expand, own focus and goal setting must stay clear in mind. This could be underlined with the change in the personal reporting procedures: the emphasis on demonstrating personal competence shifts from degrees to portfolios and development plans. As a conclusion to this, the need for education and mentoring would grow exponentially as societies around the world wake up to a raw material-free reality. This also serves the demands of market economy whereas the role of the society focus on monitoring that the freedom of one does not roll over the freedom of others.

The "Pioneering-generalist" futures table analysis proposes that the most successful individuals would be those who can focus on each project at a time to the full: the personal year cycle and rhythm might divide into sharp work-leisure dialogue. Further, this kind of requirement of efficiency creates a contradiction as an individual strives for holistic well-being and success. This provides a hint to a resting phase: the mental and physical load is balanced in special centres and resorts. The dualistic world order holds a promise of a flourishing underground culture as a counterforce that would also serve as a valuable source of inspiration.

Based on the analysis, the utilization of mental resources and capabilities takes a significant development leap further through which the understanding of own impact on the physical reality grows measurably. This stage of development could be described as a systemic evolution step, in which the consciousness becomes part of biology and human chemistry. Here, technological development turns inwards instead of the current external focus.

Further, the analysis in the table 4 underlies the existence of tight bubbles and deep expertise which together could accelerate the emergence of local successes and crises. Then, a collective recession or boom period would lose its grip as seasonal variations differentiate into smaller units.

It can be argued that not everyone is able to participate in this novel development process and the need for “Pioneering-generalist” status would widen the gap between citizens. So, society would be in a constant state of imbalance in its pursuit of an optimal relationship between the well-being of its citizens and economic activity. However, too excessive balance would mean unpleasant phase of stagnation. In any case, a return to the old is not possible because the stages of the society are irreversible due to the complex nature of social systems.

5.2.2 The futures image

In 2100, a “Pioneering-generalist” awakens to a carefully scripted day. Life goes by according to a highly tuned navigator to achieve the best possible personal outcome. Though, the schedule, nutrition, rest, and activities, are tailored by an updated score combining both the needs of the outside world and the personal aims: the content and rhythm of the day follow the current personal performance and the most important goal.

The obligation to personal development begins as soon as the compulsory education begins. This form of activity is also measured throughout the lifetime. The degree-oriented education model has changed into a set of competencies compiled from different platforms, with an emphasis on goal setting. The “Pioneering-generalist” is expected to have a constant ability to innovate and to demonstrate this competence forward. Here, the history-oriented CV is displaced with a future development plans that are updated regularly by carefully selected coaches and opponents. On a larger scale, waves of development follow each other, but more at the industry and individual level than by

country or regions. The diversified service structure makes local society less vulnerable, but at the global level, industries die and emerge at a rapid pace through their global network.

The possibility of detachment allows for nomadic life to take place and with that, an access to a wide variety of living habitats. This, in turn, will lead to an increase in valuing of empowering locations, which may face competition between people. More and more “Pioneering-generalists” from all over the world are flocking to the most special places on Earth looking for beauty and space around them. The winners are those geographical locations that have both aesthetic values and provide facilities to serve mobile lifestyle as mother ships, i.e., high-quality resorts.

Systemic evolution creates a combination of biology, chemistry, and technology in which human consciousness is appropriately focused on everything needed. In this case, medical care becomes a self-directed activity in which the reprogramming of the body is done as a combination of mind and technology: developed consciousness guides the treatment process in synergy with outside help. As a result, what is said, and thought directs the cell structure stronger or weaker. In this case, for example, cell changes are treated in a self-directed manner.

5.3 “Experimentalist”

5.3.1 The futures table

The “Experimentalist” futures table analysis in the table 5 characterizes a set of variables bringing out the full spectrum of humanity on display. Especially, it highlights the need for playful creativity through individual experiments and further, a service-oriented society. In this realm it can be speculated that creativity and innovation capacity have become a top resource in the society, new oil, as the material centred era is coming to an end. Imagination and new ideas are needed so that citizens and the institutions do not back down to the old paths – which do not exist anymore.

The adventurous spirit pictured by the analysis proposes further that the last existing silos in the society are destroyed by the maximized playfulness and societal acceptance for making mistakes. Subcultures are booming and simultaneously, the role of the authorities is diminishing. Here, the dismantling of silos creates completely new approaches to the

social structures and living conditions. This setting proposes further that the line between paid work and volunteering will be blurred: any activity that builds a creative society forward is considered valuable, and it is compensated accordingly.

Table 5. The futures table: "Experimentalist".

CATEGORIES	VARIABLES		
CAPACITY			
Personal resilience	Key resource	Neutral	Irrelevant
Network and charisma	Full transparency	Moderate level of transparency	Tight bubbles
AWARENESS			
Spirituality and metaphors	Key resource	Neutral	Demonized
All instincts in use	Mental sense focus	Physical sense focus	Extended with technology
CARPE DIEM			
Perfect timing	Key resource	Neutral	Irrelevant
The miracle of unplanning	Supported	Accepted	Impossible
Surrendering to flow	Key resource	Neutral	Despised
REVOLUTION			
Licence to make mistakes	Key resource	Possible for some	Not accepted
Controlled anarchy	Encouraged limitedly	Neutral	Demonized
ADVENTURE			
Making impossible possible	Possible for everyone	Possible for some	Controlled by the institutions
The playfulness	Key resource	Neutral	Demonized

Though, the burden of diversity poses new challenges. For democratic decision-making, this would mean a difficult process when it comes to drawing the line between legitimacy and individual freedom of expression. To make it concrete, individual freedom could be counterbalanced by an appreciation of personal performance: this could be delivered in a form of public report or index.

The "Experimentalist" analysis in the table 5 underlines the role of the physical activity and flow. The infrastructural structures and facilities are challenged by this demand and they are in the need of serving these goals. Here, together with the appreciation of experimentalism, the existence of aesthetics and functional activities would dominate the landscape: there is no room for any kind of uninviting and unhuman construction or design. In addition to this, it can be argued that the intense connection to own physicality creates new kind of health in population.

There is an option for new kind of togetherness as a conclusion of the arising role of flow and playfulness presented by the analysis. In this regard, the countries with more community driven culture would stand out. This could mean a new kind of status for instance for African countries in the global decision-making process. At the individual

level, empathy, interaction, and self-management skills are emphasized as the importance of communities grows. No one is left out of the system.

5.3.2 The futures image

The “Experimentalist” economy is run by the model of a hybrid economical system. The creativity is cherished throughout the society at any cost. Here, the basic income model and the post-fossil society accelerate this process further. The era of communities and diversified economies have begun and the number of different forms of co-habitation takes place as the social policy decisions support this disruption further. The rise of the fourth sector in the form of urban and rural activism is one example of the development step as the boundary between producer and consumer is disappearing.

All this is condensed by the rise of the sharing economy and the circular economy where residents provide their services to others and reciprocally procure them from others. In this process, as more and more people are considering their purpose of life and their own place in the system, organisations invite people to create problems rather than find solutions and simultaneously, offer positions without any ready-made frames.

The production structure based on large production series is decentralized so that an increasing proportion of goods are manufactured close to customers, according to individual needs. A new kind of craftsmanship will increase as the application and coordination of things becomes a significant part of personal success. Accordingly, universities, schools, and institutions turn their roles from teachers into facilitators and curators by bringing together the necessary elements and top experts in the field.

In this realm, the “Experimentalist” survives with little monetary earnings and capital for instance as a recycling strategy planner, a social architect, a local food selector, a professional encourager, a residential diplomat, or as an experience stimulator. Ultimately, the value of human care would increase, and the position like practical nurse would become the most respected and best paid profession in the world.

In practise, on an individual level, the personal experiments and risk-taking efforts are needed to accumulate points as part of the creativity score. Daily exercise and routines are needed to maintain the creativity capacity. Here, the society takes an active role by turning the residential areas into theme parks that invite constant play and experientialism. Further, these unique, and unconventional locations increase short-distance and suburban

tourism. In this development path, artists will be selected for urban leadership positions to ensure the high-level creative attraction.

5.4 “Techno-utopist”

5.4.1 The futures table

"Techno-utopist" futures table analysis pictured in the table 6 brings together a combination of characteristics that underline the unique status of technology. In this description, the limitless, universally accessible technological possibilities are at the forefront of the development path together with the control set by the society. The digital reality is flourishing and creating unprecedented technologically enhanced opportunities to a humankind.

Table 6. The futures table: "Techno-utopist".

CATEGORIES	VARIABLES		
CAPACITY			
Personal resilience	Key resource	Neutral	Irrelevant
Network and charisma	Full transparency	Moderate level of transparency	Tight bubbles
AWARENESS			
Spirituality and metaphors	Key resource	Neutral	Demonized
All instincts in use	Mental sense focus	Physical sense focus	Extended with technology
CARPE DIEM			
Perfect timing	Key resource	Neutral	Irrelevant
The miracle of unplanning	Supported	Accepted	Impossible
Surrendering to flow	Key resource	Neutral	Despised
REVOLUTION			
Licence to make mistakes	Key resource	Possible for some	Not accepted
Controlled anarchy	Encouraged limitedly	Neutral	Demonized
ADVENTURE			
Making impossible possible	Possible for everyone	Possible for some	Controlled by the institutions
The playfulness	Key resource	Neutral	Demonized

Further, the analysis argues that the open and agile of networks as well as personal digital ability dictate for most part the individual reality. In this process, life could be independent of linear time, place, and other people, as high-quality digital platforms would dominate the performance. In the course of this kind of development path, face-to-face encountering requires special arrangements, and it is something to be avoided. In this realm, the rise of a ubiquitous society would, for instance, blur the concept of reality as the synchronization would replace the linear planning process. Hence, similar individual rhythms, and desires overlap each other and turn into new possibilities.

The control and surveillance policies defend their place in the “Techno-utopist” world as the tolerance for making mistakes stands low and role of the institutions is underlined. Although, everything is left with an e-trace, the errors might not be entirely avoided as they would provide valuable data for AI. Though, with this continuum the solutions like blockchain technology would replace the need for institutions by building the trust between different actors. Then, the requirement for transparency challenges organizations to reveal a wide range of information about themselves, to an extent of confidentiality.

Based on the analysis in the table 6, the changes in the operating environment and the formation of the information society could force to reconsider the role of regions and states altogether. Similarly, the boundaries of alliances and international commitments could be shaking. It can be argued that those places and circumstances that can guarantee the best possible technological capabilities would turn out to be the most successful ones. This could lead to a new positive phase in the societal development altogether: the rise of technological equality.

Scientific provability and applicability encapsulate the key characteristics of the “Techno-utopist” analysis. This development curve will allow the scientific method to be extended to new industries and among new facilitators. Here, technology would have a universal status rather than a role as an assistant tool.

Though, it can be assumed that the ability to confront a person and understand human needs would remain as an asset in this world order as well. The most successful individuals could be those who know how to communicate with both machines and people. Philosophers and humanists are needed to ensure the desirable direction for development and define moral codes as the technology steps into the body and mind. Due to this, the demand for technology-free life could be risen in the public debate.

5.4.2 The futures image

In 2100, the "Techno-utopist" will take out a loan for a specially equipped smart chip device instead of an apartment. These new digital dimensions provided by the chip enrich everyday life in an unprecedented way and provide an important way out of physically static life. Instead of techno-dominance, technological intelligence has formed a deep but equal partnership and coexistence with a humankind. Through that, the world is becoming immediate and ostensibly direct.

The development of infrastructure is emphasized with the dialogue of interiors, equipment, and bits. Personal scanners, sensors and drug printers borrowed from the sharing economy services take care of the affairs and health of secluded citizens. Health is treated at an on-demand biohacking station, where people receive health counseling optimized for their genes. In this case, perceptions of the human life cycle become blurred, and more and more people live as old as the capacity of the smart chip allows.

Face-to-face communication between people has almost come to an end with the development of smart devices and advanced technology. Here, communication turns into form of synthetic telepathy, where electronic signals replace the words. The first prototypes help people recover from a cerebral infarction and get in touch with autistic people. Transmitting thoughts becomes as easy as any other bodily function. In this case, communication includes all dimensions there are: visible and invisible and sensory, and non-sensory properties of everything existing.

Through this, the experience of separateness changes and disappears in part because everything becomes one functional entity in terms of communication. For this reason, companies no longer recruit individual employees, but instead small, super-groups of 3-5 people working seamlessly together. This is important because working life has become a field of contradictions: modern work is done for the needs of people who will never be met, in an organization whose values are not shared, and for a supervisor who is not known. The efficiency of companies' operations is becoming an increasingly important criterion for recruitment and customer loyalty.

The world that relies on bits has become a haven for cyber security. Among other things, most of the police's work is aimed at strengthening information security and securing against cybercrime. Alongside the world wide web, several other bit universes exist through which the different realities are reached - or not. The best of them extends beyond the planet earth.

This is counterbalanced by extreme naturalism and an off-grid lifestyle that creates completely net-free and electricity-free areas on the earth. Fostering the relationship with nature and with the old traditions is in the hands of a few.

6 Discussion

6.1 Pioneering index

It can be stated that the need for different views stands high as we are on our way to a new state of social and economic development: the new era is not here yet and the old era is not yet left behind (Kurki 2020; Wilenius 2017). This transformation period underlines the emergence of new conditions and opportunities. It is characteristic of the in-between period that the possibilities for choice - possible and desired futures - increase. However, the choices are never made unanimously, but in conflict with needs, values, and intentions. Here, the pioneer approach questions the need for confrontation: the key is in the first place to focus the own capacity on creating something new – and not that much protesting the old.

According to the characteristics of pioneers, the most creative part of humanity is realized especially through play and adventure. Curiosity expressed by play seem to represent a respect for all wonders of life. Here, a proactive person has realized being free to choose the reaction in all situations, but at the same time choosing the consequences of the choices done. It can be argued that by creating opportunities to play at all levels, the true forces of humanity would be unleashed in our society. When life is a struggle for survival, there is not too much room for play. And correspondingly: when life reaches a point where it is no longer a mere struggle for survival, the structures that prevent the realization of play to come true appear as a mere waste of human life and humanity.

The research revealed the radicalism behind the pioneering efforts. In general, it seems that it is desired to give the impression of standing in a front line, but in practice quite a few people are in the end walking the talk. This is understandable as, like highlighted in the previous analysis, the true disruption, dissidence, and irregular behaviour, seem to be outcasted and even dangerous activity: it contains the ingredients of a revolution.

With this in mind, I state that the individuals who produce and promote disruption should be cherished: they should be given to a genuine chance to concentrate on their action. In our human herd, gatekeepers are well needed, but in the existence of a radical creation process, some level of anarchy must be tolerated. This will challenge the prevailing understanding of progress and success as well as the metrics we use to demonstrate those operations further. Hence, one of the key global performance indicators should be

developed to demonstrate the opportunities for creativity in which the elements of personal originality roll over the proof of social worthiness and obedience. This could provide a tipping point to a societal change.

In this regard, the privacy provided by society must be high enough for individuals to dare to engage in random acts of creative experimentations. Meaning, life without supervision, reporting and social monitoring. As Minkinen argues (2020) the development and continuity of creativity is somewhat based on the genuine privacy provided by society. In other words, strong surveillance culture holds a promise of a homogeneous society and with that, a reduction in creativity.

It can be postulated that as the pace of development increases, the pioneering lifestyle becomes more mainstream. In a creativity and playfulness driven society, the ideals of speed, real-time, and experientialism are emphasized, which may lead to more emotional driven decision and action making tactics. Human responsibility is then emphasized in an unprecedented way. The threat of such a course of development can be seen as the underestimation of perseverance, in which case the law of cause and effect gradually will lose its significance.

In the age of intangible resources, the value of experience and enthusiasm is most likely to be increased. Although time cannot be changed, it is possible to change personal attitude - indefinitely. Philosopher Esa Saarinen (2021) states that our thinking consists of a reflective and automatic component. Meaning that an autopilot is needed to survive through everyday life, but the contemplative component must be kept alive to experience a meaningful life. On a personal level, it both about becoming aware of own uniqueness, and simultaneously understanding the big picture above. The anatomy of enthusiasm is unique to everyone, but worth exploring further.

6.2 Significance instead of agenda

Futures research, like many fields of our society, manifests itself through agendas: megatrends and prevailing ideals in particular. Through that continuum, the danger is that the field itself will become stagnated and scripted, i.e., that the futures research and foresight projects end up presenting simple and easily identifiable issues. Such as racism or climate change: concerns that are common to the current business and political arena and that are guaranteed to receive public attention and funding. Here, futures research

should dismantle such points of consensus and demonstrate further that these phenomena are not at all as self-evident as they seem to be. Often, these concepts involve issues of power, normalization, and background agendas that are missing from the public debate and due to that, worth revealing and discussing further.

Besides that, in the field of futures research, it is relatively easy to come up with compelling topics, but the topic alone does not make the research relevant. If that is the only focus, the methods and the research value are ignored. In other words, the content of the study is bypassed. In that case, we are very close to activities such as greenwashing, in which the resources could be used directly, for example, for climate issues as such and not for futures research or foresight practises. Further, here lies a risk that futures research will dedicate itself to the existing key concepts and theories, and that new research methods and concepts will not be actively constructed or that background assumptions and philosophies will not be considered profoundly enough.

Pioneering approach starts for the most parts with a blank page. It recognizes the realities of life without allowing them to define own reality. Pioneers embody something that does not exist, or that no one has paid attention to before. Suddenly, the impossible becomes possible because someone did it. Someone believed in his or her vision so strongly that something concrete was created out of it. This can be described as an act to clear the road to the difficult terrain with a mental jungle knife, for those who first opposed the route but became interested later and can then step on the path more easily. The one who goes first always must do the hardest work.

I feel that herein lies the power of futures research as well. Through it, there is a possibility to gain perspectives on worlds that would not otherwise be accessible. There is no requirement for general acceptance or call for similarity. One of the most important goals of the futures research is not to produce a moral list of commandments or teachings, but to convey a view or image of the future. Through this reflection, perceptions of the world can change. The requirement of orthodoxy is the opposite of what future thinking can achieve: to present themes without ready-made category or approach. When content is simplified to an extreme and only easily identifiable topics are talked about, novelties are left out. In this regard, the virtues of freedom and infinity must be actively nurtured in the field of futures research as well.

6.3 Circular society

According to the research findings, pioneering experiments have a possibility to provide signals for change, but above all, these initiatives seem to act as agents of change for the surrounding reality by shaking up the old worldviews and systems. Here, it can be speculated that most of the experiments done by the pioneers do not develop into a mass phenomenon as such, but instead, the relevance of the action is embraced through the adventurous and welcoming spirit of the pioneering. In this regard, it can be acknowledged that the experiments of the pioneers play a unique role as a counterforce for the fear of the future and with that, they act as a role model for a change.

Like pictured in the earlier futures images, the multidimensional and interdisciplinary society has a chance to grow in the future as our opportunities expand. Yet, in the face of modern abundance, both the organisations and the individuals are in a situation of choice where the long-term and short-term benefits are opposed, and the map of the big picture is needed. The strategy that proposes systemic and circular forms that were unthinkable before reflects a new plural society that is ever changing and transforming itself. In this case, practices that are based on nurturing secrets do not serve as a source of success anymore but, on the contrary, transparent operation is needed to survive. This approach requires pioneering type of attitude and stepping into an unknown void, in which case the future and the result are not over-rationalized in advance, but solutions are allowed to take the natural shape according to the specific needs of the system.

Circular economy and circular thinking are present in all industrial spheres, at the turn of the millennium, and now more than ever. Here, the pioneering approach reminds that state-of-the-art technology and processes alone are not enough to find breakthroughs in the circular systems: more radical, opponent views and initiatives together with human qualities are needed. In addition to pure material utilization, the contemporary circular economy should include know-how and other intangible capital in its processes and with that, present an agile and systemic structure in a form of a circular society. Then, a seamless flow of competence, human presence, raw materials, and energy destroys the unnecessary boundaries of organizations, employments, and institutions and provides new societal positions and structures: new ways of finding purpose and success in our society.

7 Conclusions

7.1 Research summary and findings

This thesis has provided viewpoints to futures by analysing pioneering and the pioneers concerned. In understanding this combination of individuals, experimenting, design and forerunning efforts, the research utilized the two-fold theoretical framework consisting of the constructivist foresight and the pioneer analysis. There are several options, perspectives, and presentations for outlining the future, but this research focussed in particular on describing how futures research can meet the conditions of futures making practices. First, the research utilized the concept of constructivist foresight by acknowledging that the future can be approached through experimenting and creating processes. Secondly, the pioneer analysis advocated the significance of both identifying the pioneers and further, to study them to comprehend the dynamics behind the changemaking initiatives and tactics.

The first step to answer the main research question, *A lesson learned from the pioneers: what kind of future is waiting us next?*, started by identifying the characteristics of a pioneer. This was done by personal thematic in-depth interviews backboned with the theoretical framework. In this empirical part of the study, 11 individuals were identified as pioneers and selected for the respondents by being the persons behind the initiative or being among first ones to adopt the novel idea further. In addition, the target group was limited to consist of individuals whose activities include a self-sufficiency aspect excluding the pure business focus in their doings.

The results revealed that the individual facilities and attitude play the major roles in the pioneering process. In brief, pioneers seem to act differently in many respects compared to mainstream thinking and setting, focusing explicitly on their own strengths rather than adapting to prevailing circumstances and self-evident opportunities. However, this self-realization takes place in a dialogue with the surrounding conditions, balancing with the own vision setting and tolerance of the surrounding reality. Here, it can be stated that the call to make the world a better place is somewhat present in the pioneering actions. In detail, there were 11 pioneering characteristics identified based on the interview material: 1) Personal resilience; 2) Network and charisma; 3) Spirituality and metaphors; 4) All instincts in use; 5) Perfect timing; 6) The miracle of unplanning; 7) Surrendering to flow;

8) Licence to make mistakes; 9) Controlled anarchy; 10) Making impossible possible and 11) The playfulness. Together these features create a pioneering spirit enabling to take the first step in a possible change to come.

Further, these categories were analysed through a futures table analysis to derive futures images providing views and considerations for possible futures. Based on this, three futures images were pictured. First, the “Pioneering-generalist” future image which describes a strong, self-directed individual and a project-driven society. The future image presents that due to the paradigm of high societal discipline the capacity to create disruption is focussed on nurturing individual niche skills and know-how. Further, the second future image “Experimentalist” highlights creativity, playfulness, and experimentation efforts in a highly service-oriented society. Here, the innovation capacity is speculated to become a top resource, new oil, in the society and with that, all the elements fostering the creativity are enhanced both in infrastructural and individual level. The last “Techno-utopist” future image leans on unlimited technological resources and further, on an intense integration between technology and humanity. Though, instead of techno-dominance technological intelligence pictured here forms a deep but equal partnership and coexistence with a humankind.

7.2 Further research and focus

The aim of this thesis has been to increase the understanding of the essence of pioneering through empirical material and theoretical review. In particular, the study has discussed pioneer’s characteristics and pioneering as a process and approach that anticipates the future. Still, however, this is only a scratch on the topic and several questions and possible areas for further research remain open.

As the research focus on identifying the characteristics that describe pioneering, the approach lacks, in particular, the scope for the creation and application of the actual research model utilizing the identified features. In practise, this would mean both creating the model and examining the identified categories of pioneering with a form of statistical analysis.

Further research could address, for example, how and to what extent the pioneering characteristics are realized in the population or in smaller subgroups such as young people, different occupational groups or at the regional level. Or how the features of

pioneering could be incorporated for example into the design of a new type of residential area. All in all, such a research model could lead to the creation and development of a national index describing pioneering. Ideally, the outcomes and score could strengthen the discussion on the future: how the pioneering attitude could be strengthened in society and thereby, how to increase the future success. This is a broad and ambitious proposal, but I think there is a genuine opportunity for further research.

The findings of the pioneers' in-depth interviews underlined the diversity of human capacity. Despite its many twists, turns and turmoil, it is still typical of futures research that information outside of talk and writings is left behind. With it, the information stored in the body, "the wisdom of the senses," is easily forgotten. In general, completely new areas of research could be found by combining the futures research for example, with brain research.

Further, the analysis reveals some ambiguities regarding the concept of creativity, especially when used in the context of futures research. It seems that futures research and creativity must be viewed critically together. However, this thesis reminds that we are witnessing times when issues related to creativity are present in our lives at an accelerating pace, whether we recognize them or not. So, the ability to create something new has become a somewhat fundamental question for the future. Therefore, there is a need for a better understanding of what could nourish partnership between future research and creativity. To evoke that knowledge, we need new kinds of partners and allies: new kinds of interfaces to reach out to the future.

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Appendices

Appendix 1 The list of the respondents in the alphabetical order

The respondents R1-R11 listed in the alphabetical order:

Time of the interview	Interviewee	The field of pioneering
March 16, 2021	Aikola, Juha-Pekka	Food production
February 22, 2021	Dehghan, Milad	Media
March 19, 2021	Harju-Autti, Pekka	Planetary wellbeing
February 9, 2021	Järvinen, Jouni	Forestry
February 24, 2021	Kivimetsä, Jouko	Medicine
February 11, 2021	Käpylehto, Janne	Energy system
January 18, 2021	Ojanen, Lasse	House, construction
January 27, 2021	Ponkala, Jorma	Living
January 29, 2021	Pyy, Outi	Clothing industry
February 12, 2021	Raivio, Päivi	Urban culture
February 19, 2021	Sahlstén, Mari	Food economy

Appendix 2 The original questionnaire in Finnish and the translated questionnaire in English

The original questionnaire in Finnish:

- I. ELÄMÄNTARINA
 - Miten esittelisit itsesi?
 - Miten sinusta tuli juuri sinä?
 - Mikä sinussa on mielestäsi erityistä?
 - Kuvaile opiskeluhistoriaasi. Mitä ja missä olet opiskellut?
 - Minkälaisissa työpaikoissa olet aikaisemmin työskennellyt?
 - Minkälainen rooli näillä asioilla on ollut edelläkävijyytesi?
- II. KÄÄNNEKOHTA
 - Kuinka pitkään olet ollut tällä polulla, jossa olet nyt?
 - Mikä oli käännekohta?
 - Miten kuvaamasi muutos tapahtui, mistä se alkoi?
 - Miksi niin mielestäsi tapahtui ja mitä siitä seurasi?
 - Mitä muita merkittäviä tapahtumia on ollut?
- III. ARJEN KULKU
 - Kuvaile päivääsi. Minkälaisia tehtäviä ja asioita siihen kuuluu?
 - Keiden kanssa teet yhteistyötä?
 - Mitä teet(/tekisit), että saat itsesi tekemisen äärelle silloinkin, kun ei huvita?
 - Minkälaisista ominaisuuksista on ollut eniten hyötyä?
 - Mitä aiempia valintoja tekisit toisin?
- IV. TAVOITTEET
 - Onko sinulla jokin isompi tavoite, mikä ajaa eteenpäin?
 - Entä missio?
 - Mitä pienempiä tavoitteita sinulla on?
 - Mitä teet niiden eteen nyt?
- V. INSPIRAATION LÄHTEET
 - Mikä inspiroi ja saa sinut tarttumaan toimeen?
 - Mikä antaa voimaa?
 - Mitkä asiat aiheuttavat sinulle eniten stressiä?
 - Mikä on ollut haastavin tilanteesi?
 - Mistä olet joutunut luopumaan?
- VI. TULEVAISUUS
 - Minkälainen on toiveittesi maailma?
 - Minkälaisessa maailmassa haluaisit elää?
 - Mitä pelkää?

The translated questionnaire in English:

- I. THE LIFE STORY
 - How would you introduce yourself?
 - How did you become you?
 - What do you think is special about you?
 - Describe your study history. What and where have you studied?
 - What kind of jobs have you had in the past?
 - What roles have these things played in your pioneering path?
- II. THE TURNING POINT
 - How long have you been on this path where you are now?
 - What was the turning point?
 - How did the change you described happen, where did it start?
 - Why do you think this happened and what followed?
 - What other significant events could you describe?
- III. THE COURSE OF EVERYDAY LIFE
 - Describe your day. What kind of tasks and things does it involve?
 - Who do you work with?
 - What do you do to get yourself in action when you don't feel like it?
 - What personal qualities you consider to be most helpful?
 - What previous choices would you now change?
- IV. OBJECTIVES
 - Do you have a bigger goal that drives you forward?
 - What about the mission?
 - What smaller goals do you have?
 - What are you doing for them now?
- V. SOURCES OF INSPIRATION
 - What inspires you and makes you act?
 - What gives you strength?
 - Which things cause you the most stress?
 - What has been your most challenging situation?
 - What have you had to give up?
- VI. THE FUTURE
 - What is the world like according to your wishes?
 - What kind of world would you like to live in?
 - What are you afraid of?
 - How do you see the future?
 - What kind of skills do you want to develop in the future and why?
 - What things would you like to change in general?