

Popularization of Degrowth through Transition Towns: A Discourse Analysis

- (a) **Author:** Lisa Merker
- (b) **Date of submission:** 3rd of July 2019
- (c) **Date of presentation:** 4th of July 2019
- (d) **Educational Programme:** Public Governance across Borders
- (e) **Place:** University of Twente, Enschede
Westfälische Wilhelms-Universität Münster
- (f) **First supervisor:** Dr. Ringo Ossewaarde
- (g) **Second supervisor:** Dr. Minna van Gerven-Haanpaa
- (h) **Word count:** 18.908 Words

Abstract:

Degrowth is an academic discourse in which scientists want to popularize their knowledge through movements to a lay audience. One significant degrowth movement that popularizes the degrowth discourse, is the Transition Town movement which has been established by Rob Hopkins. Moreover, both discourses seek to address the ecological crisis and argue for alternative solutions. Hence, this bachelor thesis aims to investigate how the degrowth discourse has been popularized through the Transition Town movement and answers the following research question: *“In what ways do the academic discourse of degrowth and the Transition Town discourse diverge?”*. Therefore, the research design consists of two separated discourse analyses of the two cases. Based on these analyses, it can be concluded that the two cases diverge regarding their messages. The degrowth discourse often refers to more theoretical, complex and radical messages, while the Transition Town movement uses more practical, simpler and softer ones.

Index

1. Introduction	- 1 -
2. Theory	- 4 -
2.1. <i>Academic Discourses.....</i>	<i>- 5 -</i>
2.2. <i>Social Movements.....</i>	<i>- 6 -</i>
2.3. <i>Popularization of Academic Discourses through Social Movements.....</i>	<i>- 9 -</i>
2.4. <i>Degrowth Discourse and its Popularization</i>	<i>- 11 -</i>
2.5. <i>Conclusion.....</i>	<i>- 13 -</i>
3. Method	- 16 -
3.1. <i>Research Design.....</i>	<i>- 16 -</i>
3.2. <i>Case Selection</i>	<i>- 17 -</i>
3.3. <i>Data Collection</i>	<i>- 18 -</i>
3.4. <i>Operationalization and Data Analysis</i>	<i>- 19 -</i>
3.5. <i>Conclusion.....</i>	<i>- 22 -</i>
4. Analysis	- 23 -
4.1. <i>Degrowth as a Discourse, Transition Town as a Social Movement.....</i>	<i>- 23 -</i>
4.2. <i>Issue One: Interaction between the both discourses</i>	<i>- 29 -</i>
4.3. <i>Issue Two: Same Ideas about New Concepts for the Future.....</i>	<i>- 33 -</i>
4.4. <i>Issue Three: Level of Radicality and Complexity in the Messages</i>	<i>- 39 -</i>
4.5. <i>Conclusion of Analysis</i>	<i>- 44 -</i>
5. Conclusion.....	- 46 -
5.1. <i>Answer of the Research Question.....</i>	<i>- 46 -</i>
5.2. <i>Suggestions for Future Research.....</i>	<i>- 47 -</i>
5.3. <i>Practical Implications</i>	<i>- 48 -</i>
List of references.....	- 50 -
Appendix.....	I

1. Introduction

Degrowth is an academic discourse in which scientists want to popularize their knowledge and concepts through movements to a lay audience. Therefore, the degrowth discourse is “an example of an activist-led science” (Demaria et al., 2013, p.191), because different actors like scientists and activists, exchange their ideas, discuss new concepts and develop new arguments.

Furthermore, scientists of degrowth argue that “the planet is being plundered because of economic growth” (Martínez-Alier, 2012, p.15), and they see no other sustainable alternative to solve the ecological crisis the world faces as a radical reduction of economic growth. In other words, the degrowth discourse denies the idea of infinite growth and development as they make these concepts responsible for the multidimensional crisis. Moreover, degrowth scientists often quote scholars from the 80s or even before to show that limitations to the concept of growth are not new. In the degrowth discourse scientists discuss new concepts and ideas from vegetarianism over a right-sizing economy to share jobs and co-housing and develop those further. In summary, scientists claim for a new concept how our society needs to be structured and they highlight that degrowth is “a chance of culture and a rediscovery of human identity” (Escobar, 2015, p.456).

However, these concepts are critically discussed especially in circles of the academic, political and economic elites as degrowth demands include a reduction of power, luxury and wealth especially for those actors. Therefore, the degrowth discourse argues for a revolutionary change from the bottom and tries to convince ‘common’ people from their ideas as popularization of scientific knowledge tries “to assess public attitudes towards various policies” (Drews, Antal, & van den Bergh, 2018, p.266) and since the common believe about what is true of individuals in a society can legitimize the system or refuse it.

This process of popularization of the academic discourse of degrowth mostly happens through social movements. These movements can be divided into oppositional activism like demonstrations or boycotts and showing alternatives of living at the local level like cycling, alternative banks and co-housing (Demaria et al., 2013). This bachelor thesis focuses on a movement that shows an alternative way of living which is called the Transition Town. The scientist, Rob Hopkins, developed the concept of Transition Towns in 2005/6 and established the first Transition Town in 2007 in South England (Nicolosi & Feola, 2016). Since then he started to spread the idea of Transition Towns through various communicative events and currently more than 400 projects are developed globally (Seyfang & Haxeltine, 2012). The aim of Transition Towns is to “build resilient communities where resilience means the capability to

respond to external stress” (Nicolosi & Feola, 2016, p.154) and the community of the movement seeks to address the oil peak and climate change. Thus, the popularization of degrowth is a significant example for the use of science in social movements because it represents the relationship between the academic sphere and the outside.

Therefore, the aim of this bachelor thesis is to analyze how the popularization of the degrowth discourse through the Transition Town movement looks like. This topic is relevant for scientific and practical matters as popularization of science is not limited through a theoretical concept but helps to open the access of scientific knowledge for the public. Scientific reasons to further research about popularization of science is that scientists and activists often deny their interaction and therefore the research in this field is still limited in numbers and amount. Moreover, popularization is an useful concept for scientists to understand how their concepts and ideas are translated by activists and how these concepts are changed in the process of popularization. These findings can deepen the understanding of popularization of science and make this process more effective in the future. Practical reasons to analyze the case of degrowth and Transition Towns are that often these discourses have been analyzed regarding their efficiency or their compatibility as a new sustainable concept in society but little attention has been paid to the aspect of the popularization of degrowth through Transition Towns. Additionally, degrowth and Transition Towns are new and influential discourses which represent an alternative answer to the ecological crisis which have to be discussed more in society as the ecological crisis is an extreme challenge for our and future generations. Thus, all possible answers to this crisis have to make public so that we as a society can decide which path we want to take. Therefore, the example how degrowth is popularized through the Transition Town movement is important since it shows how scientific knowledge can be and is used by the public.

To conclude, the aim of the bachelor thesis is to deliver new insights about social movements and their interaction with scientific knowledge and therefore, following research question is analyzed:

“In what ways do the academic discourse of degrowth and the Transition Town movement diverge?”

Moreover, this thesis focuses on specific subquestions which helps to structure the analysis and to answer the main research questions. The first two subquestions are: What is the academic discourse of degrowth? And what is the Transition Town movement? These

subquestions present the two discourses and their concepts in more detail. Concretely, it means that both discourses are analyzed separately in matters of how they present their key ideas and how the discourse is organized.

A third subquestion focuses on comparing the findings of the analyzes of the two discourses. Therefore, it discusses: What are the differences between these two discourses? The aim of the third subquestion is to analyze how the scientific knowledge of degrowth is translated and therefore popularized into the Transition Town discourse and what differences can be found. Therefore, the subquestion answers what are the similarities and what are the differences of these two discourses which can be interpreted regarding the popularization of degrowth.

The last subquestion provides new information about possible reasons for the differences by questioning: How can these divergences be interpreted? The aim of this subquestion is to deliver first assumptions and interpretations about the reasons why scientific knowledge is presented differently at the public level and why the popularization of an academic discourse leads to differences. Moreover, the answer of this fourth subquestion focuses on what such differences can mean regarding the popularization of scientific knowledge.

In conclusion the bachelor thesis is structured as following: first, the theoretical background for the bachelor thesis is explained and discussed. Secondly, the methodology of the bachelor thesis is introduced and the structure of analyzes is paraphrased. The third chapter is about the analysis in which the four subquestions are answered and the findings are concluded. The last chapter is the conclusion in which the main findings are represented, suggestions for future research are made on the basis of the unexpected findings and practical implications for the degrowth discourse are discussed.

2. Theory

The aim of this theory chapter is to discuss and to define the theoretical framework of the bachelor thesis. Moreover, the chapter lays down the theoretical basis for the analysis about the two discourses. The focus of the theoretical background instructs the interaction between academic discourses and social movements by using different, specific and widespread theories. In more detail, the theory chapter is about academic discourses, interactions between academic discourses and social movements and about the popularization of scientific knowledge for the public. Moreover, the chapter is separated in five sections.

The first section provides theories about discourses and in particular about academic discourses. This section lays down the foundation for the first subquestion of this bachelor thesis as the question wants to define what the academic discourse of degrowth is.

The second section explains the characteristics of a social movement and how a social movement interacts with science. The theories of this section are needed for the second subquestion which refers to the Transition Town movement. Furthermore, this section shows how social movements translating academic discourses to lay audiences.

The third section picks up these two theoretical concepts about academic discourses and social movements and puts them in the context of popularization of science. In other words, the third section deals with the interaction of scientific knowledge between discourses and the public sphere, more concrete with social movements. The concept of popularization is the main theoretical basis for the analysis of the comparison of the two discourses and thus refers to the third and fourth subquestion since these questions are about analyzing and interpreting the differences between the academic discourse of degrowth and the Transition Town discourse. Additionally, the term popularization of science in this bachelor thesis refers to the particular popularization of the specific academic discourse of degrowth.

Furthermore, the next section illustrates the current research about the degrowth discourse regarding the theoretical concepts of the previous three sections. The aim of this section is to give a first overview about the theoretical backgrounds of the degrowth discourse and to define the key insights of degrowth.

The last section of the theory chapter summarizes the main conclusions based on the presented theories. This section aims to present expected theoretical assumptions for the case of degrowth and to guide the analysis of the degrowth discourse and the Transition Town discourse.

2.1. Academic Discourses

In this section the theoretical concept of discourses is explained. Therefore, the concept of discourses is discussed first in general and in a second step the academic discourse is defined by comparing the goal of an academic discourse with the goals of a political and media discourse.

Habermas “one of the most influential and widely cited German philosopher and social theorist of his generation” (Edgar, 2006, p.15), developed the theory of communicative action in the 1970s which he uses as the basis for developing the theoretical concept of discourse ethics. He argues, that there are four validity claims which are necessary so that ordinary people “use their communicative skills to create and maintain social relationship” (Edgar, 2006, p.15). Firstly, the statements of the speaker have to be meaningful. Secondly, the statements can be questioned regarding their truth. Third, the speaker have to be able to say what he or she has challenged and fourth, the speaker can be questioned by others (Edgar, 2006). Based on these four validity claims of communicative action, Habermas defined a discourse as “the process through which the assumptions and claims made by participants in communication are subjected to discussion and criticism, in order to be accepted or rejected” (Edgar, 2006, p.42). With this definition, he distinguishes discourse from the everyday communication which, in his opinion, breaks down information. Moreover, a discourse depends on the participants agreement and it therefore requires a “truly open and rational debate” (Edgar, 2006, p.45). In the case of Habermas, it points out that everyone can question anything and can introduce new ideas and concepts. Moreover, Habermas argues that discourses are a “form of communication that is removed from contexts of experience and action” (Habermas, 1975, p.107) which means that it is highly theoretical.

Other scientists, such as Frickel and Gross, put a greater focus on the definition of an academic discourse than on discourse in general. For them, an academic discourse is defined as an intellectual or academical movement (Frickel & Gross, 2005). Its emergence arises on questioning existing traditions in the academic sphere, which had an unquestionable character (Habermas, 1975). In other words, the goal of an academic discourse is to start discussions about long-term concepts and its efficiency. Moreover, this process happens through an academic discourse in which the existing tradition and its validity will be changed through new ideas and concepts (Habermas, 1975). Therefore, the old structures in this sphere, that are taken for granted, are questioned throughout the academic discourse (Habermas, 1975) (Edgar, 2006) (Frickel & Gross, 2005). In comparison with the goals of a political or media discourse, the difference becomes clear. With a political discourse political actors aim to legitimize their

status and “to maintain their hegemonic power” (Reyes, 2011, p.783). Hence, the goal of a political discourse is always connected to legitimization and to current power structures in the political sphere (Reyes, 2011). Furthermore, media discourses in contrast are about culture, “both reflecting it and contributing to its creation” (Gamson, 1989, p.3). This double function of a media discourse makes the analysis of it more complex than other discourse analyses (Gamson, 1989). Hence, an academic discourse can only be established in the scientific sphere as they are about questioning existing concepts in science by presenting ‘better’ ones.

Furthermore, Frickel and Gross argue that such academic discourses do not appear out of nowhere, but by formulating key ideas and by starting to coordinate and to produce collective actions. The widely accepted theory by Frickel and Gross defines academic discourses “as collective efforts to pursue research programs or projects for thought in the face of resistance from others in the scientific or intellectual community” (Frickel & Gross, 2005, p.206). Moreover, they argue that scientists of an academic discourse aim to produce a coherent program that combines new ideas with resistance knowledge and the influence of existing power structures in the academic field through collective actions (Frickel & Gross, 2005). For the development of an academic discourse, it is important that the scientists are convinced of their ideas. In other words, scientists of academic discourses have to believe in “the truth of (their) ideas” (Frickel & Gross, 2005, p.208) and are often directly or indirectly influenced by their environment.

To conclude, an academic discourse is considered as a collective action by scientists and is defined throughout its goal to question traditions with an unquestionable character through new ideas and concepts. Within an academic discourse, every participant has the opportunity to question anything and to present new ideas. Therefore, an academic discourse can be distinguished from the daily communication and is often characterized by a highly theoretical discussion. Finally, scientists within a discourse believe in the truths of their ideas and want to shift the power structures in the scientific sphere.

2.2. Social Movements

Social movements are the key actors in popularizing scientific knowledge of academic discourses, even “the relationship between social movements and science have tended to be neglected by academics and activists” (Jamison, 2006, p.46). However, the interaction between social movements and academic discourses is an important part of this research as “both scientific discoveries and social movements have the ability to influence the behaviors and attitudes of everyday individuals” (Bergstrand, 2014, p.320). Scientists as Bergstrand argue that

the role of social movements are special as they have an enormous impact in popularizing academic ideas into the public (Bergstrand, 2014). Examples of such movements are Reformation movements in sixteenth century, or new movements in the Enlightenment (Jamison, 2006). Therefore the question ‘What are social movements?’ arises which is answered in this section of the theory chapter by explaining the concept of social movements and their role as a facilitator between academic discourses and the public.

Social movements are broad phenomenon and concepts that are analyzed in literature. For this bachelor thesis, the key idea of democracy and social movements are considered because the analysis does not focus on the characteristics of social movements themselves but is used for understanding the role of social movements within the popularization of science.

For Rancière, social movements consist of “the presuppositions of equality, subjectification dissensus from police identification” (May, 2012, p.25). For this thesis, only the factors equality and subjectification are important because they are key factors for a democracy. Thus, the factor, dissensus from police identification, is not introduced as it not supports the aim of the research of the bachelor thesis.

One presumption of his concept is that all people have equal intelligence which means that everyone “can understand themselves and their world enough to create meaningful lives together” (May, 2012, p.8). Furthermore, May argues that for Rancière, democracy is not about identity, which means that you group people through their roles in society, but for him democracy is about equality. In other words, democracy and movements are about solidarity and not about classifying people regarding political identities (May, 2012). One example that May uses to make this point clear is that “a black movement is not a movement that has deep roots in blackness” (May, 2012, p.11) but is about the equal experience of racism and discrimination. Therefore, these movements are often started from the bottom and are based on “the idea of equality for anyone and everyone” (May, 2012, p.36). Social movements are hence a good element where people with different identity backgrounds can meet and talk on an equal basis because according to May in social movements the focus lays on equal thinking and experiences and not about political classification. Thus, the factor of equality in social movements can function as a bridge between scientists from academic discourses and ‘common’ people of the public sphere.

The second concept of Rancière, subjectification, refers to several community actions through which a group of people are connected. Based on these actions the feeling of ‘we’ raises and is connected through the equality in the group. Thus, subjectification seems to be an important aspect in the context of popularizing knowledge of academic discourses since

through subjectification the social coherent of the different groups within a social movement are strengthened. Furthermore, the element of equality seems to be the key factor for May that influences anti-globalization movements because they deny the political concepts of identities. For such movements, these identities are a form of oppression of the society and therefore they are included into the critique of capitalism (May, 2012). Moreover, because images of such oppressions are not as significant and obvious as for example the images of the US civil rights movements, it is more difficult to generate a mass movement (May, 2012).

The theory of Rancière can serve as a basis to understand the role of social movements in a more complex context like the popularization of science. As Rancière argues that social movements are about equality and equal intelligence, it becomes clear that through the collective actions in a movement ‘common people’ feel empowered to interact with other actors like scientists, politicians or media. Therefore, in literature scientists present different ways how social movements interact particularly with academic discourses. On the one hand, scientists like McCormick argue that social movements “contest and (...) control scientific knowledge” (McCormick, 2007, p.609) and on the other hand, scientists like Bergstrand argue that social movements use scientific knowledge because the societal transformation will be more successful “if such frames are backed by scientific discoveries” (Bergstrand, 2014, p.324). For this bachelor thesis, the later way of interaction between social movements and discourses are important since the main theoretical background of the analysis of this bachelor thesis is about the popularization of science. Therefore, Bergstrand defines the role of social movements in more detail as “the ability (of activists) to transform that information (scientific findings) in a way that spreads awareness, changes public opinion and promotes activism” (Bergstrand, 2014, p.321).

In summary, the key concept of a social movement by Rancière can be described as a group that defines itself not based on political identities but on equality and their common actions to their key ideas. Based on these actions, Rancière argues that subjectification takes place and the members of a social movement identify themselves as a community. Regarding the interaction between social movements and academic discourses, different types are described. For this bachelor thesis, only the use of scientific knowledge through social movements is important as it is part of the popularization of science. Moreover, scientists argue that participants of a specific movement often have a greater ability to promote new scientific insights into the public than scientists of academic discourses.

2.3. Popularization of Academic Discourses through Social Movements

In this section the main part of the theoretical framework of this bachelor thesis namely the popularization of science is explained. Since the 70s, public participation in science is a common phenomenon although there is still no common definition of the popularization of science (Peterson, Cole, Jasanoff, Pinch, & Markle, 2006). However, scientists agree that science has always been part of the public culture by drawing or contributing to it and the purpose of popularizing scientific knowledge is to make it understandable for a broader audience (Myers, 2003). Therefore, this section refers to different theories about popularization of science to come up with a suitable definition of popularization of science for the analysis of this bachelor thesis. In this section the different theories about defining and explaining characteristics of popularization of science is presented. In a next step, the benefits and disadvantages of such a process are illustrated. Moreover, the terms popularization of science and popularization of academic discourses are used equally in this bachelor thesis.

In the past, scholars have characterized the academic and public sphere as two independent areas which do not interact very much with each other (Calsamiglia, 2018). Right now, this view has shifted to a more open one which defines the academic and the public sphere as two different cultures. Moreover, Grundmann and Cavaillé describe the relationship of scientists as a complex one because they interact with colleagues as well as with the public (Grundmann & Cavaillé, 2000).

The interaction between scientists and public is often referred to as the popularization of science which is described in the widespread theory, called the dominant view (Myers, 2003). This interaction happens through social movements which serve as a bridge between the two actors – scientists and lay people. In more detail, the dominant view argues that popular science can be divided into two discourses: a scientific one and one on the outside, mostly in forms of social movements (Myers, 2003). Therefore, supporters of the dominant view assume that scientists and their institutions have the power to say what science is and what not. Moreover, they argue that scientists investigate to find out more information about the public sphere which is “a blank slate of ignorance” (Myers, 2003, p.266). Other assumptions of the dominant view are that the scientific information are written down in form of statements and that the translation of scientific knowledge for the public sphere always implies changes in form of textual changes, but also that the knowledge is “simplified, distorted, hyped up and dumbed down” (Myers, 2003, p.266). Another argument of the dominant view is that “knowledge travels only one way from science to society” (Myers, 2003, p.266). However, scientists like Hilgartner criticize this aspect. They argue that transformation of knowledge circulates between science and society

(Hilgartner, 1990) (Myers, 2003). Some examples for this argumentation would be the public ideas of gender, race, identity or sexuality that influenced science (Myers, 2003). Therefore, the research of this bachelor thesis rejects the aspect of “knowledge travels only one way from science to society” (Myers, 2003, p.266) by the dominant view and characterizes the transformation of knowledge as cycling process.

Moreover, other scientists have widen and deepen the understanding of popularization of science. For example, Calsamiglia argues that secondary education and specialization in universities has led to “general knowledge” (Calsamiglia, 2018, p.140) and to the blurring of the strict line between the academic and the public sphere. Examples for this blurring line, are the publication of books or articles in specific journals because these channels are used to explain specific knowledge to a general public. Furthermore, H. Calsamiglia and T. van Dijk have defined the concept of popularization as “a vast class of various types of communicative events or genres that involve the transformation of specialized knowledge into everyday or lay knowledge, as well as, a recontextualization of scientific discourse, for instance, in the realm of the public discourses of the mass media or other institution” (Calsamiglia & Van Dijk, 2004, p.370). In more detail, important aspects to understand the analysis of popularization, for H. Calsamiglia and T. van Dijk, is that the deep, specific knowledge between an academic concept, system, or discovery is often not important for the people. Instead, the technical or more practical aspects of it are more significant because people can memorize them much faster and they can be applied by the public. In another article, H. Calsamiglia argues that for scientists the “object has an immanent value in scientific and specialist contexts” (Calsamiglia, 2018, p.140) while the public sees the value in the “external to all theories and methods: what is important, is its application, its utility and the consequences of its use in people’s lives” (Calsamiglia, 2018, p.140). Moreover, another scientist, McCormick, argues that the access to new information by the scientists to the public leads to a simulation of creating community organizations or movements (McCormick, 2007).

In addition, the blurring between the two spheres and the popularization of knowledge lead to positive outcomes for the academic discourse as well as for the social movement. For example, one benefit element of popularizations is that on the one hand, social movements achieve more legitimacy by using scientific knowledge and mobilizing new resources. The scientist, Jamison, highlights the example of environmental movements which often make use of scientific concepts and translate them into a socioeconomic one (Jamison, 2006). Another advantage presented by McCormick is, that social movements can “adopt or adapt science to fit their strategies” (McCormick, 2007, p.611). Furthermore, McCormick argues in favor of

scientists by stating that scientists profit from the social discourse because social discourses can generate and increase new research, public awareness and are part of the creation of policies (McCormick, 2007). Moreover, both discourses can learn from each other (McCormick, 2007). Therefore, the relationship between these two actors can be characterized as ambivalent (Peterson et al., 2006).

However, scientists also point out negative aspects of the popularization of science. McCormick argues that when science is used to promote a social change, it often takes much more time than political or public pressure does (McCormick, 2007). In addition, Calsamiglia argues that the “lack of proper communication between experts and non-experts can lead to failures” (Calsamiglia, 2018, p.140) and a special awareness and sensitivity are necessary by the popularization of science to not produce such failures and divergences.

In conclusion, the concept of the popularization of science is seen as a discourse that tries to formulate knowledge for non-specialized readers so that they can use this information and integrate it with their existing knowledge and daily life (Calsamiglia & Van Dijk, 2004). Therefore, the two spheres start to blurring and profit of their interaction regarding legitimacy, new knowledge and insights, and increasing awareness. However, it is important that the translation of scientific knowledge is done carefully to reduce failures and divergences.

2.4. Degrowth Discourse and its Popularization

This section picks up the three concepts of the previous sections and specifies them for the degrowth discourse. Therefore, this section is structured as follow: First, the degrowth discourse is introduced. Secondly social movements of degrowth are represented and their function in the popularization of degrowth is explained. Furthermore, first theoretical results by other scientists about the popularization of degrowth or more broad about environmental discourses are illustrated. The aim of this section is to give a first overview about the case of degrowth and about existing findings.

The degrowth discourse has emerged out of two sources and perspectives. The first source is the “revolution of civilization” (Martínez-Alier, Pascual, Vivien, & Zaccai, 2010) by Jacques Ellul and Bernhard Charbonneau which has developed further in the 70s by several authors like the British economist Ernst Fritz Schumacher or Ellul and resulted in questioning the concepts of growth. The second source of degrowth is the culturalism intellectual criticizing by Iran Illich who has argued that people should be more independent of markets and institutions so that they get the opportunity to generate “genuine use values” (Martínez-Alier et al., 2010).

Now, the degrowth discourse is linked to the inter-disciplinary perspective from ecological economics and industrial ecology. Furthermore, Demaria et al. defined six sources for degrowth which are about ecology, critiques of growth and development, meaning of life and well-being, bioeconomic, democracy, and justice (Demaria et al., 2013). In this bachelor thesis a special focus lays on the sources about critiques of growth and development, meaning of life and well-being, and bioeconomic as they summarize the main ideas of the academic discourse of degrowth. Therefore, only these three sources are explained. The source of the critiques of growth and development is defined as a critique of the homo economicus and the promotion of a value change to a more sharing, and giving society (Demaria et al., 2013). Moreover, with the concept critiques of growth and development, degrowth supporters criticize the common culture that is defined by specific technologies, consumptions, and production models which are especially developed in the north and only focus on maximization as an ultimate drive (Demaria et al., 2013). Their vision for the future is to produce a culture that mainly considers social relations and conviviality as important values. The culture furthermore identifies itself with the rediscovery of the human identity (Demaria et al., 2013). Furthermore, the source of meaning of life and well-being highlights the “disconnection between income increase and the life satisfaction over time” (Demaria et al., 2013, p.197). Therefore, the life-style of “working more, earning more, selling more” (Demaria et al., 2013, p.197) needs to be transformed in a simple way of living that is socially orientated and includes the concept of reduction of consumption. This concept is based on the Easterlin Paradox, which states that after a certain amount of money, someone’s happiness is no longer correlate with money he or she has. Bioeconomic is another source which refers to limits to growth. In more detail, it is about “slow down process of material degradation” (Demaria et al., 2013, p.198) and “decreasing energy return on investment and the imminent peak oil” (Demaria et al., 2013, p.198). Moreover, it denies the idea in ecological modernization which means that degrowth disagrees with the assumption that new technologies and improvements will solve the ecological crisis we face today. For degrowth, the biophysical limits are set and cannot be overcome by a version of green growth (Demaria et al., 2013).

Furthermore, as G. Kallis argues in a roundtable debate that most of the degrowth discussion takes place in the academic sphere but “with the intention to go beyond them” (Chertkovskaya, Paulsson, Kallis, Barca, & D’Alisa, 2017, p.196). This shows that the scientists of the degrowth discourse have the intention to popularize their knowledge to lay people. Therefore, they often try to cooperate with movements who are in line with the degrowth ideas and concepts. These movements are highly diverse and can be summarized into two groups (Alexander, 2013). One

group is about the collaboration “those who work together with established civil society organizations or those who act as pressure groups to core democratic institution” (Alexander, 2013, p.217). In other words, these groups are about “building alternatives or civil disobedience” (Alexander, 2013, p.217). The other group is about oppositional activism which is mainly about campaigns. For this bachelor thesis the first type of a degrowth movement is important as the Transition Town movement is linked as “the most well-known international initiative” (Alexander, 2013, p.218) who presents alternative ways of living. Therefore, scientists like Demaria et. al. argue that the degrowth is not only limited to academic discussion but is a discourse that is popularized and led by activists of different movements as well (Demaria et al., 2013).

Moreover, the third element, popularization of degrowth, has not got much attention in research yet. Therefore, little can be said about existing findings for the popularization of degrowth. However, as degrowth can be linked to an environmental justice discourse and movement, findings about the popularization of environmental justice are used to make first assumptions for the popularization of degrowth. Schlosberg argues that “one of the significant characteristics in much environmental justice scholarship has been a relationship between academic work and movement groups” (Schlosberg, 2013, p.50). Thus, it can be argued that in this field the academic discourses work with movements together “to bear in meaningful ways into praxis and diverse forms of public engagement” (Schlosberg, 2013, p.50). Additionally, Schlosberg illustrates that this interaction leads to benefits for the academic discourse and for the environmental movements. In fact, he points out that this relationship is an opportunity for an academic discourse to “learn, actually learn from the language, demands, and action of movements” (Schlosberg, 2013, p.50).

All in all, the degrowth discourse is an academic discourse that tries to popularize its knowledge through movements.

2.5. Conclusion

Based on these theories, specific guidelines for the analysis are assumed. There are four sections of guidelines. The first one is about academic discourse and the assumptions for the degrowth discourse. The second one is about social movement and the assumptions for the Transition Town movement. The third one is about the popularization of academic discourses. Concretely, the third section is about what is expected from the process of popularizing the degrowth discourse through the Transition Town movement to lay people. Moreover, the last section focuses on concrete conclusions about the existing state of the degrowth discourse.

First, it is expected from the academic discourse of degrowth that its discussion influences the existing power structures of the academic field through collective actions as it is presented as the theoretical goal of academic discourses. Moreover, based on the communicative action theory of Habermas, it is predicted that within the academic discourse of degrowth every participating scientists can question anything and bring in new ideas before they agree on a common concept. These presumptions are checked with the first subquestion that analyzes and explains what the academic discourse of degrowth is.

In addition, the discourse in the public sphere can be described as a social movement that is based on the characteristics by Rancière: equality and subjectification. Through the elements of equality and subjectification social movements become to 'places' in which participants meet without political identities and on an equal basis. Therefore, it is expected that in the Transition Town movement the elements, equality and subjectification, are included and additionally that the Transition Town movement functions as a 'place' in which people with different backgrounds meet and exchange ideas. Furthermore, given that in general social movements are developed from the bottom, the same is presumed for the Transition Town movement. These assumptions are used for the second subquestion about the Transition Town movement.

Third, for the popularization of degrowth discourse through the Transition Town movement different assumptions are predicted. Since it is common for the popularization of academic discourses to organize various types of communicative events or genres, it is expected that within the degrowth discourse communicative events like conferences are organized as well. Furthermore, based on the existing theories it is predicted that the degrowth discourse and the Transition Town movement interact with the other sphere and particularly with each other. Moreover, it is assumed that the transformation of knowledge about degrowth can be characterized as a cycled because this are widely accepted assumption in the theory about popularization of science. However, as scientists point out that the translation of the key issues of academic discourse for a lay audience normally leads to divergences like simplicity or overstatements, such divergences are assumed to appear in the translation of the degrowth discourse into the Transition Town movement as well. Moreover, it is presumed that the degrowth discourse and the Transition Town movement have different focuses as this is on key element of the theory according to Calsamiglia and van Dijk. Hence, the degrowth discourse will focus more on theoretical concepts while the Transition Town discourse will be more practical. These presumptions are the frame work for the comparison of the two discourses and for the last two subquestion.

Fourth, the main sources about the degrowth discourse in literature are about the critique of growth and development, the meaning of life and well-being, as well as the critique of consumption in the source of bioeconomic. Therefore, it is expected that these concepts appear in the analysis of the degrowth discourse and the Transition Town movement. Additionally, research about environmental justice discourses and movements show that this relationship increases the translation of theoretical, academic concepts into practical implementations and is beneficial for both. Hence it is assumed that the relationship between the degrowth discourse and Transition Town movement exhibit same characteristics as the relationship of environmental justice discourses and movements.

All in all, these presumptions aim to answer the overall research question in what ways the two discourses diverge.

3. Method

For the purpose of analyzing the popularization of degrowth by comparing the academic discourse of degrowth and the Transition Town movement, this bachelor thesis rests on a comparative case study that aims to compare the two discourses and their interactions. This chapter presents the methodological framework of the bachelor thesis. The first section refers to the research design and justifies the choice of doing a discourse analysis. The next section presents the two case studies discussed in this bachelor thesis. Moreover, in the third section the data collection for the analysis is introduced and the last section discusses data operationalization and demonstrates how the data is analyzed.

3.1. Research Design

This bachelor thesis aims to analyze how the idea of degrowth is presented in each discourse and how these analyses differ from each other. Therefore, the research type chosen for this bachelor thesis is a hermeneutic one as the analysis is about interpreting the use of texts, symbols and codes of people in different contexts. In more detail, the research type, is a discourse analysis because it aims to “explore how socially produced ideas and objects that populate the world were created in the first place and how they are maintains and held in place over time” (Philipps & Hardy, 2002, p.5) which is the idea of this bachelor thesis.

The used research design is a comparative case study as with the design of a case study the analysis becomes more intensively and delivers new insights about a specific case. For the comparative case study of the popularization of science the academic discourse of degrowth and Transition Town movement are chosen as cases for the thesis. These two cases are significant for research about popularization since the case of degrowth is quite new and influential and the Transition Town movement is one of the most significant degrowth movements that functions as a bridge between the academic and public spheres.

To conclude, the research design of this bachelor thesis is a comparative case study. Therefore the two cases are first analyzed in a separately discourse analyses and then these findings are compared.

3.2. Case Selection

As mentioned before, the bachelor thesis includes two cases. Therefore, this section illustrates the two cases in more detail and explains why these two discourses are relevant for the popularization of an academic discourse.

One case is the academic discourse about degrowth because it is a new academic idea which has an influential potential on current environment discussions. The discourse of degrowth criticizes the political and economic concept of infinite (green) growth and argues that this concept cannot be connected to the concept of sustainability. Moreover, the supporters of the discourse want to get researchers involved in a new idea that will change the current system regarding sustainability, economic, social and ecological issues. This case has been chosen for the analysis because it is extremely relevant for science. The academic discourse of degrowth is one of the only discourses that questions the current status quo and therefore, the current power structures in the society. Moreover, their new ideas and concepts are radical and include for some parts of the society a loss of power, wealth and privileges. Therefore, the degrowth discourse is a highly interesting case.

The other case is the Transition Town movement which has been developed by the scientist, Rob Hopkins, who introduces twelve steps of how to establish a Transition Town. The idea behind the Transition Towns is to involve the local community in sustainable actions and to strengthen the attention for living in a more sustainable way. The discourse behind it, is to no longer wait for politicians to act, since the society has the ability to establish a change on its own. Therefore, the movement discusses how a sustainable life can look like and how the society, as a community, can provide sustainable change. The case, Transition Town movement, has been chosen as one example of a degrowth movement because it shows how an movement can function as a bridge between the scientists and lay people and can translate the theoretical ideas of the academic discourse for the public. Hence, it makes the Transition Town discourse a good example for a degrowth discourse in the public sphere.

The time frame for the analyzed data is the same for both discourses which allows them to be comparable. The chosen time frame for these two cases is from 2008 until 2019 because the first Transition Town was established in 2007 and the data should be up-to-date to generate reliable and confident findings. Moreover, the context of the data for the bachelor thesis is focused on the discourses in the so called Western world since this is where both discourses established their emergence.

3.3. Data Collection

This section discusses the topic of data collections. There are two different data collections and each of them addresses one of the two discourses since the discourses are analyzed first separately and are compared in next step. Therefore, the data collection of the academic discourse about degrowth is presented first and secondly the data collection of the Transition Town movement is summarized.

The term ‘degrowth’ was accepted at the international conference in Paris in 2008. Ever since, many initiations of degrowth, as an academic research area, have been developed. Moreover, the civil debate has started to become an international one (Themes, 2019). After the conference in Paris, there has been four other conferences until 2016: in Barcelona 2010, in Venezia 2012, in Leipzig 2014 and in Budapest 2016. Almost all conferences except the conference in Venezia have published a general document about the conferences via their website. These conference papers are used as data for the analysis. For the conference in Venezia, papers of the different workshops of the topics work and democracy have been selected and are included in the data collection of degrowth discourse for the analysis as well. Moreover, throughout the conferences a scientific committee has been established which has two scientists as representatives namely Joan Martinez-Alier and Serge Latouche. Both scientists are often named as the Degrowth authors and representatives of the degrowth discourse in Europe (Kallis, 2011) (Martínez-Alier et al., 2010). Therefore, the newest books of these two scientists are considered for the analysis for the academic discourse as well because they are figures that represent the European discourse about degrowth in the academic sphere. The book “Rethinking Environmentalism: linking Justice, Sustainability and Diversity” by Joan Martinez-Alier’s book has been published in 2019 and covers 302 pages. The newest book by Serge Latouche named “Farwell to Growth” covers 210 pages. The English version has been published in 2009 but the German version has been published only in 2015. Therefore, the book is still up-to-date. A third source for the degrowth discourse are randomly selected articles about degrowth from 2012 to 2018 to include up-to-date data. The articles are published in the two Degrowth Journals namely Cleaner Production and Ecological Economics.

For the Transition Town movement, two books by Rob Hopkins are taken into account. First, he published the Book ‘The Transition Handbook: From oil dependency to local resilience’ (2008) which is a handbook that helps to get an overview about the idea and construct of Transition Towns. His second book is called ‘The power of just doing things’ (2013) and it refers to different actions people did at the local level. These two books are the main sources for Transition Towns and are always used as a popular quote in the context of

Transition Towns. Furthermore, Rob Hopkins holds several talks at TED to promote his idea which is another source to spread the idea of Transition Towns. The TEDTalk “Transition in a world without oil” is one example of a communicative event as well as an interview at the degrowth conference in Leipzig that took place in 2014. The last data that are used for the analysis is the website of the network of Transition Towns that is called Transition Network because it summarizes the diverse projects in different countries. The documents selected from the website of Transition Networks are: “7 Ingredients for a just, fair and inclusive Transition” (2011) by Catrina Pickering, “How to guide Events toolkit for Transition Initiatives” (2015) by REconomy Project, “21 stories of transition” (2015) harvested by Rob Hopkins, “The Essential Guide to Doing Transition” (2016) by the Transition Network and “It’s time to talk about We” (2018) by Sarah McAdam. Moreover, the four videos published on the website are considered for the analysis as well: “Why do you do Transition” (2013;2014) and “Transition at 10 years old” (2017). The videos of the data are treated like written documents while body language as well as other components of the videos are not be considered in the analysis (appendix). Since the data of the degrowth discourse does not include any videos, it would not be comparative anymore.

All in all, the data of the degrowth discourse involves conference documents of all degrowth conferences until 2016, two books by leading figures and up-to-date articles from degrowth journals. Therefore, the data consists of sources that are used to open up the scientific knowledge to a broader audience and are sources to popularize degrowth knowledge. Moreover, the data of the Transition Town discourse consists of two leading books by the key figure, Rob Hopkins, several videos about the key idea, the motivation of the participants and the process of this discourse after ten years, and consists of several documents published on the Transition Network website.

3.4. Operationalization and Data Analysis

This section explains the operationalization of the theoretical concepts which are used in the analysis. Thus, the concepts are introduced and operationalized through a specific coding scheme. Moreover, the section explains how the coding scheme is applied in the analysis. The aim of this section is to make the analysis transparent and replicable.

The analysis of this bachelor thesis particularly focuses on a discourse analysis. A discourse analysis aims to “explore how socially produced ideas and objects that populate the world were created in the first place and how they are maintains and held in place over time” (Philipps & Hardy, 2002, p.5).

To analyze the data of both discourses, the concept of degrowth has to be operationalized. Therefore, the three concepts of degrowth by Demaria et. al. which are illustrated in the theory chapter are used as concepts for the analysis. The three concepts refer to ‘critiques of growth and development, meaning of life and well-being and bioeconomic’ and are selected because they summarize the main arguments of degrowth. Another reason is that they make the two discourses comparable as in the analysis both discourses are scanned for the main issues of degrowth. Hence, the ways how the two discourses present these issues can be compared and interpreted.

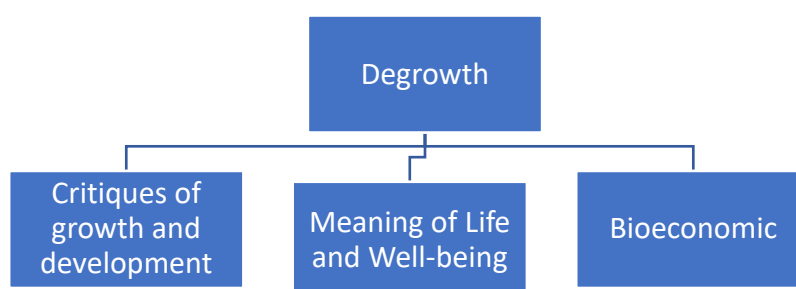


Figure 1: Operationalization of degrowth

To analyze the data of the three concepts, a coding scheme is used which is based on the previously explained concept of operationalization. Thus, each concept of degrowth has its own explanation and keywords. Moreover, the keywords for the analysis for the degrowth discourse and the Transition Town movement differ, because the documents are written in different contexts and for different audiences. Moreover, since both discourses have different keywords, the different ways of how both discourses use metaphors and symbols for explaining their messages can be analyzed more efficient.

In general, this data analysis’ method fits to a complex analysis of mainly document data and suits an analysis which focuses on the linguistic characteristics of discourses. The table below illustrates how the coding scheme is structured and introduces the concepts, the definition of each concept and the specific keywords for each discourse:

Concepts	Explanation	Keywords for the academic discourse	Keywords for the Transition Town discourse
Critiques of development	As a critique of the homo economics and the promotion of a value change to a more sharing, and giving society	Degrowth, de-growth, postgrowth, post-growth, post development, growth, incompatible, finite, infinite, increased production, increased consumption, crisis, multidimensional, opportunities, decentralization, new economy, cooperation,	Wealth, wealthier, economic growth, post-growth, postgrowth, bottom-up, new economic, sharing, decentralization
Meaning of Life and well-being	As the source of meaning of life and well-being that highlights the “disconnection between income increase and the life satisfaction over time”	Well-being, wellbeing, human needs, quality of life, cultural revolution, sustainable, lifestyle(s), life-style(s), creativity, social ties, community, justice, equity, fairness, humanity	Community, social coherence, each other, help, neighbors, neighborhood, friendship, isolation, dialogue, inclusion, fun, enjoy
Bioeconomic	As “slow down process of material degradation” (Demaria et al., 2013) and “decreasing energy return on investment and the imminent peak oil”	Climate crisis, climate change, fossil fuels, environment, environmental, resilience, diversity, ecosystem, protect, environmentalism, biodiversity, resource(s), ecological footprint	Peak oil, climate change, finite, consume, consumption, diversity, resilience, natural limits, low-carbon, awareness, sustainability

Table 1: Overview about Concepts and Keywords of degrowth

Moreover to run the data analysis, the program ‘atlas.ti’ is used to include a greater amount of data in the analysis. Thus, the videos of the Transition Town movement that have been used as data for the analysis have been transcribed and used as written text in the data analysis (see appendix). The only exception that has been made is regarding the two books of the Transition Town movement. They are not included in the data analysis through the atlas.ti but have been analyzed individually because there are no online pdfs available.

3.5. Conclusion

All in all, the research design for this bachelor thesis is a comparative case study that uses the method of a discourse analysis to analyze the popularization of science. The two cases that are chosen for the analysis, are the academic discourse of degrowth and the Transition Town movement. In addition, there are two data collections and each of them addresses one of the two discourses. The data collections consider books, articles and documents of the conferences and the website. For the analysis, degrowth is operationalized into three concepts and each concept is translated in different keywords for each discourse. Therefore, the two discourses can be analyzed first separately and later can be compared to each other. Hence, the ways how the two discourses present these issues can be discussed and interpreted in terms of how they define the concepts and use metaphors and symbols to underline their messages. Based on these findings the presumptions of the theory chapter can be checked.

4. Analysis

The aim of the analysis is to answer the main research question: ‘In what ways do the academic discourse of degrowth and the Transition Town movement diverge?’ Therefore, the next five sections try to analyze these divergences by answering the four subquestion.

The first section is about analyzing the degrowth discourse regarding to the theories about discourses and the Transition Town movement regarding the theories about social movements and their function as a bridge in the case of popularization of science. Therefore, the first section answers the first two subquestions: What is the academic discourse of degrowth? And what is the Transition Town movement?

The next three sections address the last two subquestions namely: What are the differences between these two discourses? And how can these differences be interpreted? Therefore, each section focuses on one issue of the popularization of science and they analyze in what ways the degrowth discourse and the Transition Town movement diverge and what might be the reasons for these divergences or similarities. Moreover, the sections connect the findings to the theories about popularization of science which are presented in the theory chapter. The three issues of popularization that are discussed and analyzed for the case of degrowth and Transition Town in the next three chapters are interaction between the academic discourse of degrowth and the Transition Town movement, similar ideas and concepts for the future, and the level of radicality and complexity in the message of both discourses.

In the last section all findings are concluded and the main research question is answered.

4.1. Degrowth as a Discourse, Transition Town as a Social Movement

This section introduces the degrowth discourse and the Transition Town movement and answers the first two subquestions by using the theory of academic discourses and social movements which are explained in the theory chapter. The aim of this section is to see in what ways the degrowth discourse conforms an academic discourse and in what ways the Transition Town movement matches a social movement and serves as a bridge for the popularization of the academic discourse of degrowth. Therefore, the section consists of two parts. First it analyzes the first subquestion regarding the degrowth discourse. Second, it investigates the case of the Transition Town movement and answers the second subquestion.

For the degrowth discourse it can be said that it bears resemblance to the characteristics of an academic discourse because of several reasons which are explained in the following. First, the degrowth discourse criticizes the concept of growth and development which is a traditional and widely accepted concept in the scientific sphere. The example above underlines the

argumentation of the degrowth discourse that growth used to be influential but after a while, it started to be questioned because it could not deliver satisfying answers anymore:

“The story of growth used to be very powerful but is losing attraction as well as the ability to answer peoples’ daily questions” (Aigner, Ebinger, Gran, & Sommer, 2014, p.3f).

This example shows that scientists favoring degrowth inspect the concept of growth and its efficiency to solve today’s problems and thus they deny this idea. Since degrowth scientists criticize the concept of growth and development, they criticize an existing tradition which has an unquestionable character, which is typical for an academic discourse (Edgar, 2006). Furthermore, the critiques of the accepted concept of growth reason the emergence of the degrowth discourse which can be proved as the critique of growth is usually used to introduce and explain the idea of degrowth:

“First, that this is not just an economic (or financial) crisis. It is a multi-dimensional crisis of democracy, social mores and the environment. Second, that the roots cause behind these different crises is a fixation with economic growth” (Kallis, Kerschner, & Martinez-Alier, 2012, p.173).

In this quote, it can be exemplary seen how the degrowth discourse introduces the topic by criticizing the idea of growth. Moreover, scientists in the degrowth discourse do not only criticize the concept of growth but make growth responsible for the multidimensional crisis nowadays. Therefore, the goal of the degrowth discourse matches with existing theories that the goal of an academic discourse is to question existing tradition and to struggle the current power structures (Edgar, 2006) (Frickel & Gross, 2005).

Secondly, scientists of the degrowth discourse develop new ideas and concepts to replace the traditional concept. One significant example for a new concept is the presentation of several ideas for a new economy. With these ideas, scientists discuss how an economy, that is not based on growth, can look like:

“Call for a paradigm shift from the general and unlimited pursuit of economic growth to a concept of right-sizing the global and national economies” (Conference, 2008, p.2).

“The solidarity economy draws on various projects and initiatives that mainly focus on the everyday practices of alternative ways of living, producing, and consuming. This includes cooperative housing and urban gardening projects, barter clubs, self-governed businesses, ecovillages and transition town projects” (Bauhardt, 2014, p.62).

“A ‘Cinderella’ economy: socially valuable sectors that go unnoticed and appear unproductive by standard GDP metrics. It includes activities of low productivity (e.g. caring) and ecological investments of low profitability, but high labour intensity and high levels of work satisfaction and social value added. Payment is low but the quality of work can be high” (Kallis et al., 2012, p.147).

“Proponents of degrowth emphasize the necessity of immediate, voluntary and fair processes of lowering production and consumption to reduce the ecological footprint of the global economy, which they explicitly distinguish from an involuntary and harmful process of economic recession” (Khmara & Kronenberg, 2018, p.722).

These examples are significant for the degrowth discourse because they show the different concepts that exist within the discourse. Moreover, these examples underline that parts of the communicative action theory by Habermas apply in the discussion between the participants of the degrowth discourse. One example is that scientists within the degrowth discourse contradict ideas of other members, who share their struggles and their lines of thoughts. Therefore, the examples can be seen as a second reason why the degrowth discourse bears resemblance to characteristics of an academic discourse since the degrowth scientists develop and share new ideas and concepts within the discourse.

A third reason is that the degrowth discourse conforms the process character which is common for an academic discourse according to the theory of Habermas. One example is the adding of new factors like well-being, bioeconomic, health and lately technology within the degrowth discourse. Therefore, scientists of degrowth start to discuss topics and factors with their new ideas and concepts through which they develop the idea of degrowth further and in which degrowth starts to become more complex:

“Climate change itself is the product of the modern energy-society relationship. The drive to increase capitalist industrial economies required an extraordinary rapid use of energy (...). This created a carbon-intensive ideology of progress that went unquestioned for nearly a century in

part, became it contributed to a spectacular increase in economic growth” (Lele, Brondizio, Byrne, Mace, & Martinez-Alier, 2018, p.206).

“A lot of concepts like eco-innovation, cradle-to-cradle, or eco design have been developed since the 1980s that certainly show important features also for technologies in a degrowth society” (Vetter, 2018, p.1780).

Another example for this argument is that the degrowth discourse is linked to the interdisciplinary perspective from ecological economics and industrial ecology which highly underlines the discussion and complex process of the degrowth discourse as well.

Furthermore, another example that shows that the degrowth discourse bears resemblance of an academic discourse is that there are collective actions within the degrowth discourse. For example the degrowth discourse is further developed through several Degrowth conferences. Since 2008, there were around eight Degrowth conferences in Europe and one in Montreal, United States of America. There is also a large amount of books that discuss the degrowth discourse and address specific key ideas. Furthermore, the degrowth committee of European scientists has been established through the Degrowth conferences. The scientists of the degrowth discourse act collectively and promote a high exchange through conferences, the building of a degrowth committees and the exchange of ideas via books and journal articles. These are important parts of a discourse as according to theory by Frickel and Gross discourses are defined through collective actions. To conclude, there are several reasons that point out that degrowth is a typical academic discourse to the theory and it exhibits many significant characteristics that are typical for an academic discourse.

Furthermore, according to degrowth scientist, G. Kallis, scientists discuss new ideas and concepts within the degrowth discourse in the scientific sphere but scientists favoring degrowth want to open their knowledge and ideas for a lay audience (Chertkovskaya et al., 2017). In theory this open access to scientific knowledge often happens through social movements (Bergstrand, 2014). Therefore, this section focuses now on the second case, the Transition Town movement, and analyzes in what ways the Transition Town movement matches characteristics of a social movement and therefore conforms the function as a bridge between scientists and lay people.

First of all, the Transition Town movement shows relevant characteristics of a social movement which can be proven by several examples. The first example refers to the factor of equality introduced in Rancière’s theory. There are several quotes in different Transition Town

documents which prove that the factor of equality plays a big role in the Transition Town movement. One significant example can be found in the Transition Handbook in which Rob Hopkins explains the six principles of Transition. One of these principles is called inclusion and refers to Rancière's factor of equality:

“The scale of the challenges of peak oil and climate change cannot be addressed if we choose to stay within our comfort zones, if ‘green’ people only talk to other ‘green’ people, business people only talk to other business people, and so on” (Hopkins, 2008, p.141).

This example is significant for the Transition Town movement as the activists of the Transition Town movement argue that they want to include all people because all of them are effected directly or indirectly by today's challenges. Therefore, the movement is highly based on equality which appears in the case of Transition Town movement through everyone's ability to address climate change and peak oil (Hopkins, 2008) (Pickering, 2011). There is another example how the factor of equality is addressed in other parts of the book as well, in which Rob Hopkins writes about certain aspects that the movement needs to avoid. One lesson which has to be avoided by the members, is to distinguish between ‘them and us’ because Rob Hopkins argues that all people – even if they seem to be incurious about today's challenges – turn out to be people who actually want to do something (Hopkins, 2008):

“The more I have been involved in this work and met people working in positions of authority, by the planners, engineers, councilors and even politicians, I have seen that they are ordinary people, often with families, just as bewildered by the turn of events as everybody else” (Hopkins, 2008, p.125).

This quote from the Transition Handbook underlines once again that Rob Hopkins wants to strengthen the factor of equality among the participants of the Transition Town movement (Hopkins, 2008). Therefore, the Transition Town movement matches with Rancière's theory in which Rancière argues that equality is one factor of a social movement (May, 2012).

The second characteristic that stands out in Rancière's theory is the aspect of subjectification, which can be found in the Transition Town movement as well because the movement is about collective actions (May, 2012). All documents, for example, have practical tips and recommendations for the participants about how to organize a specific event or how to build a Transition Town:

“The toolkit shares learning (about what works, and what doesn’t), outlines essential tasks, and provides a ‘pick and mix’ menu of event modules that can be used to form your own unique event” (Project, 2015, p.1).

This citation demonstrates in exemplary matters how the Transition Town movement uses different types of tips and practical methods that can be used within the movement. Therefore, it underlines the second factor of Rancière’s theory that social movements are about subjectification. Moreover, the aim of the Transition Town documents is another example that underlines the point of subjectification as the documents often aim to give advice about how participants can do or reach certain goals. Especially in the toolkit of how to organize a Transition initiative event or in the Transition Handbook are often practical matters and how to do – tools (Taylor, 2015) (Hopkins, 2008). These show that the collective actions are an important aspect of the movement. Additionally, the movement often tells stories from different transition initiatives in which they point out what is special about them or they name them as a good example for Transition Towns. This can be seen as a further example of subjectification in the Transition Town movement and it is particularly the case in the second book by Rob Hopkins or in the document about 21 stories of Transition (Hopkins, 2015):

“Around the world communities and movements are building a new economy, rooted in fairness, equality, inclusion, a recognition that we live in a world of limits. As communities we can set about bringing assets into community ownership, inviting community investment, supporting local currencies, playing our role in creating a vibrant economy that works for everyone” (Hopkins, 2015, p.12).

This example shows the highly diverse ideas and initiatives in the Transition Town movement.

Moreover, the initiatives of the Transition Town movement increase the feeling of equality within the participants of the movement. This can especially be found in the interviews with participants of the Transition Town movement who argue that they are motivated to do Transition because of the people they meet and the friends they make in the movement (Transition Bielefeld, 2014; Transition Milwaukee, 2013; Transition Worthing, 2013):

“Transition Milwaukee and the Transition movement as a whole really helped me build relationships. I found my family and friends through Transition“ (appendix, p.VI).

“Just connecting with people, just doing things like that, just finding people who are like mine and who really want change. That is what I get out of it and it’s beautiful” (appendix, p.VI).

All of those two examples from video sequences underline the point that the collective initiatives of the Transition Town movement increase the equality and social coherence in the movement. Especially the sentence “just finding people who are like mine” (appendix, p.VI) demonstrates how important the aspect of equality is for the participants and how much they identify with each other through the same beliefs and ideas. Therefore, the characteristics of a social movement according to Rancière can be found in the Transition Town movement as the examples before underline (May, 2012).

Furthermore, as it is argued in the theory chapter, these two factors are important for the ability of a social movement to function as a bridge to popularize science and to open the access to science. Therefore, it can be concluded that the Transition Town movement has the ability to transform scientific ideas and concepts to a lay audience as Bergstrand argues in his theory (Bergstrand, 2014).

In conclusion, this section answers the first two subquestions. First, the degrowth discourse is an academic discourse which is about criticizing the long-unquestionable concepts of growth and development by presenting new ideas about a new economy which is based on different values. Secondly, the Transition Town movement has the main characteristics of equality and subjection as presented in Rancière’s theory about democracy and movement. Therefore, the Transition Town movement has the ability to function as a bridge between scientists of degrowth and lay people. To conclude, common theories about academic discourses and social movements apply in both cases. Hence, the analyses of the two cases do not show any unexpected findings.

4.2. Issue One: Interaction between the both discourses

This section refers to the first issue of the popularization of degrowth. Therefore, the interaction between the degrowth discourse and the Transition Town movement is analyzed to find out more about how the degrowth discourse uses the Transition Town movement to spread its ideas to lay people. The section is divided first in analyzing how the academic discourse of degrowth interacts with public and secondly how the Transition Town movement interacts with scientists. Moreover, in a next step the specific interaction between the academic discourse and the Transition Town movement is analyzed and how they transfer and generate knowledge.

The first issue that appears by analyzing the interaction between the degrowth discourse and the Transition Town movement is the blurring of the two spheres. There are several examples which support the blurring structures in the case of degrowth and Transition Town. These examples which are presented below, confirm the theoretical assumptions according to Calsamiglia who argues in contrast to past research that the two spheres starts to interact with each other (Calsamiglia, 2018).

The first example of the blurring structures refer to the degrowth discourse. Since the degrowth discourse started to organize Degrowth conferences in several European and Non-European cities, the border between the scientific and the public sphere becomes blurring. For example, not only scientists but activists and participants of different movements, who are part of the public sphere, participate at the Degrowth conference. Moreover, it can be said that the Degrowth discourse got a broader audience in the past years as the number of participants on the Degrowth conference increased and the different topics discussed in the different workshops became more complex. After the second Degrowth conference, for example, they decided to no longer make final declarations while on the Degrowth conferences in Paris and Barcelona the participants agreed on one specific declaration (Conference, 2008) (Economic Degrowth for Ecological Sustainability and Social Equity, 2010).

“Conferences of this type have not, since the expansion and diversification of the research streams and social movements related to degrowth, produced unified final declarations summarizing the conclusions of the debates from the conferences” (Budapest, 2016, p.14).

This citation from the final paper of the Degrowth conference in Budapest proves on the one hand that the conference becomes too big and too diverse to agree upon one final declaration that is limited in word counts and on the other hand, it shows that there are different scientific streams and social movements which underline the issue of blurring structures between the two discourse (Budapest, 2016).

Secondly, the publication of books and articles by degrowth scientists furthermore serves as another example of the interaction between the academic discourse and the public as the publication of books by scientists open up the scientific knowledge for the public according to theory. Therefore, the high number of books that has been published point out that the scientists of the degrowth discourse want to popularize their knowledge.

On the other hand, there are also examples of the blurring structures regarding to the Transition Town movement as Rob Hopkins, the leading figure of the movement, is a scientists

on a local university in Totness. Therefore, the blurring structures are not only promoted through the degrowth discourse by organizing communicative events to interact with the public but also through the movement itself. That is an unexpected insight about these two cases because existing research hardly mention the role of scientists within a movement.

Moreover, the interaction between the degrowth discourse and the Transition Town movement increases the blurring structures of the public and academic sphere as well. These interactions can be found in two examples. First, the degrowth discourse identifies the Transition Town movement as a degrowth movement since they analyze the specific initiatives of the movement in scientific articles and use the movement as one example of a practicable degrowth movement. Moreover, at the degrowth conference in Venezia there was a workshop about Transition Towns (Pailloux, 2012).

“Groups of people gather, producing transition actions against fossil fuels, resulting in a movement that develops itself from the bottom of the post-oil civilization in the sign of resilience to trigger the energy de-growth. This is the case of Transition Towns” (Pailloux, 2012, p.5).

Secondly, even if the Transition Town movement does not connect itself implicitly to the degrowth discourse, there is a high amount of similarities and overlaps between them. Moreover, Rob Hopkins, argues in the video, made at the degrowth conference in Leipzig, that he would define Transition Town as the practicable degrowth discourse that implements the concepts of degrowth into initiatives and makes it visible for the people (Hopkins, 2014).

“So for me there a lot’s of overlaps between degrowth and transition. I like to think that from my experience from the conference in Venezia, the degrowth movement is often more of a philosophical movement, while Transition is more of a practical, applied movement. Maybe, maybe you can think of Transition as a more practicable, of a more manifestation of the idea of what a post-growth economy would actually look like in practice” (appendix, p.XX).

Another aspect that appears in the interaction between the two discourses are the cycling character of knowledge transfer. This stands in contrast to the dominant view theory, which argues that in the relationship between an academic discourse and a public one, only the academic discourse generate knowledge (Myers, 2003).

“Degrowth may reach a wider audience if it can identify and communicate concrete well-being benefits. If degrowth is a political slogan with theoretical and practical implications, the

academia has just began to analyze these. By developing positive visions, and presenting implementable solutions, degrowth could contribute to a prosperous yet equitable, participatory, and environmentally sustainable society” (Weiss & Cattaneo, 2017, p.277).

This shows that the scientists of degrowth discourse argue for an increase in the interaction with movements like Transition Town movement as it would “contribute to a prosperous yet equitable participatory, and environmentally sustainable society” (Weiss & Cattaneo, 2017, p.277). Additionally, the authors argue that topics regarding well-being would benefit the size of the audience which is clearly a high topic and focus of the Transition Town movement. Therefore, this example is a first prove that shows that the generated knowledge about degrowth is influenced through both discourse.

Moreover the percentages of the all citations in the analyzed documents deliver another prove for the cycling character of the knowledge transfer. As 69,89% of the citations of the Transition Town analysis are concerning the meaning of life and well-being while only 28,12% of the citations of the degrowth discourse refer to the meaning of life and well-being (appendix, p.V). Furthermore, if the percentages are analyzed according to different time frames, the knowledge exchange between the two discourses appears even more. The documents of the degrowth discourse from the years of 2008 until 2012 the citations regarding to meaning of life and well-being are around 22% and after 2012 increased up to nearly 30% (appendix, p.V). For the Transition Town movement an increase in the citations can also be found. However, it is being found in another topic, namely; critiques of growth and development. In the time frame between 2008 and 2012 the documents of the Transition Town movement are 0,0% and then increase upon 10,85% (appendix, p.V). Thus, these two examples prove that the knowledge transfer in this case of degrowth confirms the assumption of Hilgartner and Myer who argue that the knowledge cycles between the scientific and the public sphere (Hilgartner, 1990) (Myers, 2003). Therefore, the case of degrowth proves once again as other research that the dominant view theory is partly wrong.

To conclude, both discourses can be linked to each other and interact with the other sphere. Moreover, the knowledge transfer in these two cases is not characterized by a one-way transfer from science to the public as the dominant view theory argues. Therefore, the case of degrowth confirms the argumentation of Hilgartner that knowledge is generated in both discourses and cycles from one to the other as the degrowth discourse use new insights from the Transition Town movement and the other way around. Finally, an unexpected finding is that the Transition

Town movement is led by a scientists as the role of scientists within a movement are hardly discussed in literature.

4.3. Issue Two: Same Ideas about New Concepts for the Future

The second significant issue that rises up in the comparison of the two discourses is that they both often include same terms, concepts and have the same ideas for the future and how to make it more sustainable. In other words, the degrowth discourse and the Transition Town movement use the same words and concepts and even have the same understanding regarding to their visions for the future. Therefore, this section analyzes the two visions for the future by both discourses and discuss to what extent these visions are similar. This insight appears in three different parts of the two discourses: new economy, resilience, and future vision.

First, in the concept of a new economy and how the Transition Town tries to translate the theoretical concepts of the Degrowth discourse into practical implementations. Both discourses promote the same concept of a new economy which is built upon values like voluntarily, fairness, equality, inclusion and resilience. Furthermore, they both argue that the economy needs to change in order to be locally and regionally self-sufficient and there have to be shorter ways of transportation:

“Four themes can structure the future space of sober societies: local and regional self-sufficiency, the geographical decentralization of power, economic relocalization and protectionism, concerted planning and rationing” (Latouche & Macey, 2009, p.43).

The concepts by the degrowth discourse are often highly theoretical and not really concrete. They often refer to bigger terms like in this citation to geographical decentralization or economic relocalization and protectionism. This is in contrast to the Transition Town movement, in which the focus lays more on the practical implementation and the theoretical concepts behind these practical actions, only shortly described. However, the theoretical concepts described by the Transition Town movement are close to the ones of the degrowth discourse:

“Local is the scale were tackling the huge challenges we face becomes possible” (Hopkins, 2015, p.13).

“new idea: it is the idea of local resilience as economic development” (Hopkins, 2013, p.59).

“It is the idea that by taking back control over meeting our basic need at the local level” (Hopkins, 2013, p.59).

“Built on the foundations of social justice, fairness, well-being and happiness, entrepreneurship, the vitality of local economies, resilience, sustainability and inclusion” (Hopkins, 2013, p.171).

These examples of the theoretical concepts show exemplary how similar both discourses describe their vision of a new economy. Thus the practical implementation by the Transition Town movement fits to the theoretical concepts of the degrowth discourse and strengthen the issue about the same version of a new economy even more. For proofing this assumption two initiatives by the Transition Town movement will be exemplary analyzed to the theoretical concept of the new economy by the degrowth discourse.

First, for the degrowth discourse a new economy has to be built up on local and regional self-sufficiency (Latouche & Macey, 2009). This aspect can be found in different Transition initiatives like community-gardening, the raise of community energy or even in the twelfth step of the Transition Handbook which mentions to develop an energy descent action plan. Especially the example of the energy descent action plan shows how the Transition initiative aims to build upon local self-sufficiency because it includes the aspect of using less energy (Hopkins, 2015) (Hopkins, 2008). The raise of community energy provides that the local communities can live self-sufficient and autonomous:

“Validate and nurture local action through the policies, rhetoric and personal action you take, start by looking to your own community(ies) and get involved in change, to whatever level or in whatever way is feasible. - Peter Capener, Bath & West Community Energy” (Hopkins, 2015, p.20).

This is one exemplary quote of a member of the Bath and West community energy of a Transition Town in Bath and in Corsham. They have installed a 3MW of solar PV in their own community, supported other communities and raised around 10Million Pounds through community shares (Hopkins, 2015). It shows how initiatives in the field of energy production are translated to a community and local project, which fits with the abstract concept of the degrowth discourse:

“Energy generation is something done by huge energy companies, right? Wrong. Community energy is one of the key ways communities can start to take back control of their economy, and their energy supply” (Hopkins, 2015, p.18).

This citation underlines the same understanding of self-sufficiency on a local level even more as well as that it is embedded in the 12 steps of Transition.

The second example refers to the idea by the degrowth discourse that the new economy aims to promote relocalization and protectionism (Latouche & Macey, 2009). In other words, the idea of a new economy focuses more on the local level and protects the local autonomy. This theoretical concept of the academic discourse can be found in the Transition initiative that creates Transition currencies. Such currencies can be found in different Transition Towns especially in the UK and in some other European countries. The idea is to create a local currency that has the same value as the national or European currency but the difference is that the specific Transition currency can only be used in the specific Transition Town and only in local shops (Hopkins, 2015):

“Although they take a variety of forms, the basic idea is to enhance the ‘Multiplier Effect’, the observation that money spent with local businesses circulates more times and leads to greater benefits for the local economy” (Hopkins, 2015, p.32).

This shows how initiatives about transition currencies in a Transition Town protects the local market which causes the local economy to become empowered. Moreover, the consumption behavior of the society becomes more sustainable because they start to buy local and hence, use shorter transportation ways which is better for the environment (Hopkins, 2015).

The second part in which the insight about the same concepts appears is the concept of resilience. In addition, the practical implementation to these theoretical concepts is another sufficient example of how the Transition Town movement translates the theoretical concepts into a practical action. However, before the example is presented, the theoretical concept of resilience of the two discourse is explained in order to show how similar they are. The understanding of resilience is in both discourses about the reduction of resources, finite resources, waste, consumption, resilience and sustainability:

“Human beings are turning resources into waste faster than nature can transform waste into new resources” (Latouche & Macey, 2009, p.23).

This citation refers to the degrowth discourse and underlines the aspect of waste and consumption which can be found in another citation of the Transition Town movement as well:

“Like any finite material, the faster we consume it, the faster it will be gone” (Hopkins, 2008, p.20).

This shows that they have the same understanding and it points out that the problem of production and consumption is huge. Moreover, if the exact definitions of the term resilience are compared, the extreme similarity appears even more. Firstly, both discourses argue that resilience is more complex than sustainability and therefore, resilience is the better term:

“Resilience is a more robust concept than sustainability” (Lele et al., 2018, p.6).

“Concept of resilience goes far beyond the better-known concept of sustainability” (Hopkins, 2008, p.55).

Here, it is shown that both – the movement as well as the discourse – argue in the same way that resilience is better than sustainability.

Moreover, the Transition Town movement describes resilience with the concepts of diversity, modularity and tightness of feedback. It summarizes resilience as the number of different species, their links to each other, and how extreme the extent of consequences is if something changes in the system (Hopkins, 2008). The degrowth discourse does not explain the aspect of resilience as detailed but the definition means the same as the concept of resilience, according to the Transition Town movement:

“the capacity to undergo shocks without substantially changing structure, function, feedback relationships or its fundamental identity” (Lele et al., 2018, p.137).

This quotation of the degrowth discourse and the explanation of the definition by the Transition Town movement before include both aspects of diversity and the connection between the diverse components of the environment. This highlights the same understanding of resilience in the degrowth discourse of the academic sphere and the Transition Town

movement in the public sphere (Lele et al., 2018) (Hopkins, 2008). Hence, both argue for the same necessity to change the human behavior to protect the environment.

Secondly, if we identify how the Transition Town movement tries to translate the aspect of reducing consumption into a practical action for the public, the same understanding is highlighted again. One example of such an initiative is the repair café which is about the idea to have a place where broken things can be fixed by the help and skills from the community. Therefore, the people consume less, because they start to repair things (Hopkins, 2015):

“Our planet needs helped, and Repair Café is a small event. Yet much can be accomplished in many localities by as few as two people; repairer and repairee. Energizing the sense of belonging and becoming more fully one’s self within the community is crucial to mobilizing our individual energies” (Hopkins, 2015, p.38f).

This citation underlines how the idea behind the repair café is to mobilize the community to reduce the overall consumption which fits to the theoretical concept of resilience according to the degrowth discourse.

The third part about the second issue, the same understanding for new concepts for the future, is more general as it is about how both discourses generally address the future. The degrowth discourse and the Transition Town movement, both argue that their concepts bring a better, happier and healthier future than the current system:

“such a society would certainly be more sober; what is more important, it would also be more balanced” (Latouche & Macey, 2009, p.23).

The degrowth discourse often refers to a sober society because it argues that the current system, which is based on growth, works like a drug which makes the society addicted and sick. Their visions and ideas for the future would make the people feel better and free from this addiction. Thus, the degrowth discourse uses the metaphor of drugs to explain how much better a degrowth future would be for the people. Furthermore, the degrowth discourse often speaks about an utopia if they talk about the future, which shows that they would describe the future in a positive way because an utopia is a positive vision of the future:

“The de-growth project is therefore an utopia, or in other words a source of hope and dreams. Far from representing a flight into fantasy, it is an attempt to explore the objective possibility of its implementation” (Latouche & Macey, 2009, p.33).

The Transition Town movement does not use the drug metaphor or argue that the people right now are addicted to the current system but they present the future as well as the degrowth discourse in a positive way (Hopkins, 2013):

“It is a future where we feel more connected to the places we live, where our settlements are net exporters of energy, where our diets are more seasonal and local and where our urban landscape are full of food production in a range of guises” (Hopkins, 2013).

The citation shows that the Transition Town movement uses again words which are easier to understand than utopia or other words used by the degrowth discourse. Moreover, the description by the Transition Town movement are often more detailed than the ones by the degrowth discourse. Anyway, both discourses indicate a positive vision for the future and point out that the future with their ideas will be better than the current status quo.

All of these examples show that the translation by the Transition movement works better than in the normal popularization of science as there are hardly any differences. The only differences appearing are that the academic discourse is more theoretical and uses scientific words while the Transition Town movement is more practical oriented and tries to explain theoretical concepts more understandable for lay people. This is no surprise as the theory by Calsamiglia and van Dijk states these points out.

One Reasons why there are nearly no differences in the new concepts for the future are the high interaction between the two discourse which is mentioned in the previous section. Another reasons is that Rob Hopkins, is a scientist himself and hence, is able to have a better understanding of scientific terms than “common” people. Therefore, he uses similar theoretical concepts compared to the degrowth discourse and only uses words which are easily to understand for the public.

To conclude, it can be said that the findings of this part are unexpected as the theories about popularization of science often highlight the failure in translation and the differences of the concepts when concepts of the academic discourses are popularized through social movements. Reasons why this is not the case for the degrowth might be the strong interaction between the degrowth discourse and the Transition Town movement. Moreover, Rob Hopkins as a scientists

might have better skills in translating and understanding academic concepts than other leaders of social movements.

4.4. Issue Three: Level of Radicality and Complexity in the Messages

The last issue talks about the different levels of radicality and complexity in the messages of the two discourses. In comparison of the two discourses it appears that the messages differ in their radicality and complexity. The messages of degrowth discourse on the one hand are often highly radical, extreme and complex while the messages of the Transition Town movement on the other hand are softer, less extreme and complex. This can be found in two examples: first in the concept of critiques of growth and development and secondly in the concept of meaning of life and well-being. Therefore, this section is structured as follow: first, the two examples are explained and moreover the consequences of this divergence are discussed.

As it states above, the first example is about the different messages regarding to the concept of critiques of growth and development. The degrowth discourse is more radical and negative when it talks about an alternative to degrowth or about the existing status quo than the Transition Town movement:

“Degrowth is conceivable only in a degrowth society, or in other words within the framework of a system that is based upon a different logic. The alternative really is: degrowth or barbarism” (Latouche & Macey, 2009, p.10).

This shows that the degrowth discourse is not a new idea of how the world becomes more sustainable but of how the system in the current world has to be changed dramatically. Scientists of the degrowth discourse disagree with the idea of mixing degrowth with a current system because then it will not be degrowth itself, which means that it would still include bad elements of the current system (Latouche & Macey, 2009). Furthermore, they argue that every system, other than degrowth, is based on the wrong values and therefore is unhealthy for the society. For the degrowth discourse the world system needs to be based upon humanity, voluntary, resilience and community. The citation underlines this with the term “degrowth or barbarism” (Latouche & Macey, 2009, p.10) because it shows that everything else than degrowth does not fit with the culture of humanity. Moreover, the citation shows how extreme the messages of the degrowth discourse can be as barbarism is a strong word.

Another example that shows how radical the degrowth discourse convicts the current system is their drug metaphor:

“We have become addicted to the drug of growth. Toxic addiction to growth is not, as it happens, a metaphor” (Latouche & Macey, 2009, p.22).

This citation shows again how the degrowth discourse denies the current system, which is based on growth. Degrowth scientists compare growth to a drug and argue that the society has become addicted to it. This addiction can be interpreted as a metaphor for a revolutionary and radical change because if you do a detoxification from drugs, then it can never be soft since detoxification is hard, stressful and demands self-discipline. This highlights the aim of the degrowth discourse.

In contrast to the degrowth discourse, the Transition Town movement does not convict the current system in such a radical way. The Transition Town movement criticizes the current status quo in a softer way than the degrowth discourse does. This becomes obvious in the words that the Transition Town movement uses in order to explain their critique as they are less radical than the words chosen by the degrowth discourse:

“We’ve discovered this extraordinary material (oil) and then based a whole way of life around it” (appendix, p.IX).

Rob Hopkins says this sentence in his TEDTalk and it becomes apparent that his words have more of a describing character than of a convicted one. Thus, the message seems not as negative as the one by the degrowth discourse. Another example that shows how few the Transition Town movement wants to convict of the current system we live in:

“Most things around you rely on cheap oil for their manufacture and transportation. This is not a criticism – it’s just how it is for us all, and has been for as long as most of us can remember. It almost impossible to imagine anything else” (Hopkins, 2008, p.94).

Therefore, one can argue that the Transition Town movement is not as radical when it talks about the current status quo and not about the scientific discourse about degrowth. They are much more indulgent with the current system and do not talk about it as negative as the degrowth discourse does:

“Our task is to build another economy, alongside the current, highly vulnerable, energy-intensive, debt-generating, high-carbon economy” (Hopkins, 2013, p.232).

This citation exemplary points out how soft the critique of growth and development is in the Transition Town movement, compared to the degrowth discourse. The Transition Town movement argues that they want change because of environmental challenges not because they really criticize the idea of growth. Moreover, just like the degrowth discourse, they aim for a value change in the society, but the difference is that they do not blame the concept of growth and therefore the current status quo alone for it:

“But are we to assume that the same brilliance and creativity and adaptability that got us to the top of the energy mountain in the first place is somehow mysteriously going to evaporate when we have to design a creative way back down the other side? No” (appendix, p.IX).

This statement stands in contrast to the messages of the degrowth discourse in which scientists would never describe the society as brilliant, creative and adaptable because of what they achieved in the past. Therefore, it becomes clear that one divergence in the concept of critiques of growth and development lay in the fact that the Transition Town movement does not popularize the radical and dramatical critique of the degrowth discourse for the lay people.

Additionally, Rob Hopkins is very clear about the difference between the Transition Town movement and the degrowth discourse regarding to the critiques of growth and development:

“The degrowth movement takes a position that growth is inherently a bad thing, where in the Transition movement we take more of a position that it is are more inappropriate thing” (appendix, p.XX).

This underlines the argument that both discourses have a different point of view on the current system and on the concept of growth. Therefore, there is an existent divergence in this part between the two discourses.

The second example that underlines this divergence can be found by analyzing the concept of meaning of life and well-being as the messages of this concept totally differ except for the factor of social justice. The aspect of justice in the concept of meaning of life and well-being is used in the same way since both discourses argue that minorities and poor people of a society

are often the ones that have to suffer most from the effects of climate change. Lele et al. focus on the fact that often the people who suffer mostly from the air pollution are minorities and poor people of the society which they characterized as injustice (Lele et al., 2018). This argumentation can be found in the Transition Movement as well:

“People who do not have their needs met are also often the people most vulnerable to effects of climate change and peak oil” (Pickering, 2011, p.7).

Here, it becomes obvious that both, the discourse and the movement, argue that poor people suffer and are likely to continue to suffer from the consequences of environmental issues.

However, the degrowth discourse uses the concept of meaning of life and well-being in a boarder and more complex matter as the degrowth discourse connects the concept of meaning of life and well-being more significantly to social inequality. Therefore, it can be concluded that the degrowth discourse is arguing in a general way and from a broader perspective that includes the overall problems of meaning of life and well-being in the society. In other words, the degrowth discourse debates this concept in a complex manner:

“This path (economic growth) is now leading to an increase in inequality as half of the wealth in the world is estimated to belong to a scarce 1% of the population” (Cosme et al., 2017, p.322).

In contrast to this, the Transition Town movement strongly uses this concept to underline how Transition has a positive impact on the daily-life of the participants and how it is the reason for motivation of the participants to actually do Transition. For example, people of the Transition Town movement often point out that the community and social coherence within the Transition Town movement motivates them to do Transition:

„First of all, I get to know people, get to live in community with my neighbors, with people in the same town“ (appendix, p.VII).

Furthermore, this aspect is again highlighted in documents of the Transition Town movement as they mainly refer to community coherence and social relationships:

“Networks empower people as the health of the whole community depends on the health of the community as a whole, so the more you can work together and support each other the more you strengthen” (Hopkins & Thomas, 2016, p.28).

As it becomes apparent in these examples the divergence in meaning of life and well-being lays in the complexity of the messages of the two discourses. In the degrowth discourse the concept is very complex while in the movement it is more general and practicable. Therefore, it can be argued that the radical and complex messages of the degrowth discourse are not translated sufficiently through the Transition Town movement. In contrast, the Transition Town movement simplifies these messages to softer and more simple ones than the ones of degrowth discourse. Hence, insights and knowledge about global relations and connections are not really addressed by the Transition Town movement. For instance, the degrowth discourse refers to inequality on the global and international level but such inequality is not addressed in the Transition Town movement:

“Global economic growth has not succeeded in reducing poverty substantially, due to unequal exchange in trade and financial markets, which has increased inequality between countries” (Conference, 2008, p.1).

Furthermore, this divergence in the two concepts – critiques of growth and development and meaning of life and well-being - has several reasons. First of all, both discourses have a different main audience. The degrowth discourse speaks mainly to other scientists and therefore, abstract, deep and specific scientific knowledge is more attractive than the practicable aspects of it. In contrast to this, the Transition Town movement addresses its messages to the public. Therefore other aspects are more important. For example, that the messages are clear and understandable. Hence, abstract and complex statements are not attractive for the public as they are more difficult to understand than concrete and practicable statements. In addition, the Transition Town movement is striving towards the use of concrete statements and often connects them to practicable issues so that the people can understand and imagine what consequences this could have in their lives . Thus, as it mentioned before the divergence of the two discourses fits to the theory by H. Calsamiglia and T. Van Dijk who point out that objects are more important for the academic sphere and practicable for the public (Calsamiglia & Van Dijk, 2004).

Another reason why the two discourses diverge, especially in the level of radicality, might be that radical changes and revolutionary actions that are favored by the degrowth scientists, do not motivate lay people to do something. The reason why it motivates scientists of the degrowth discourses lays in the aim of an academic discourse as discourses want to change the

power struggles in the scientific sphere and want to be more radical as they criticize an existing and unquestionable tradition (Habermas, 1975). Therefore, the messages of a discourse have to be extreme in its critique to make the standpoint more clear and obvious for other scientists. In the case of the degrowth discourse, the messages are therefore more radical and extreme than in the Transition Town movement as it is favored by degrowth scientists. In contrast to this, it actually causes quite the contrary consequence for a lay audience since such radical messages scare people and they decided to not do something as lay people often are overextended by the revolutionary and radical tasks. This aspect is mentioned as well in the Transition Handbook in which Rob Hopkins argues that people often do not feel empowered to change the challenges of today like climate change and peak oil. Therefore, he argues in favor of the empowerment of people by offering them a positive and motivating vision of the future instead of describing them bad visions that happens if they do nothing:

“Too often environmentalists try to engage people in action by painting apocalyptic visions of the future as a way of scaring them into action. The question this part of the book asks is what would happen if we came at this the other way round, painting a picture of the future so enticing that people instinctively feel drawn towards it” (Hopkins, 2008, p.79).

This shows that Rob Hopkins does not want to scare people with dramatic information but he wants to use positive visions and softer statements to motivate people to actually participate in the Transition Town movement. Therefore, Rob Hopkins explains indirectly why radical and negative messages of the degrowth discourse are not translated as such for the common people.

All in all, the divergence that appears in messages about the two concepts – critiques of growth and development and meaning of life and well-being – are lead to simplifications in the translation of degrowth knowledge through Transition Town movement. The reason for this is unexpected as it lays in the different audiences and in the way that lay people cannot deal with radical and extreme messages.

4.5. Conclusion of Analysis

This section summarizes the most significant insights of the analysis of the two discourses regarding the research question: In what ways do the academic discourse and the street-level discourse of degrowth diverge? Therefore each of the four subquestions that support the structure of the analysis is answered.

The first subquestion, what is the degrowth discourse, can be answered as follow: The degrowth discourse has been developed out of the critique of the current status quo and the mainstream idea of growth and tries to replace the concept of growth through new ideas and concepts that are based on different values.

Secondly, the answer of the second subquestion regarding the Transition Town movement identifies the Transition Town movement as social movement as it based on equality and subjectification. Therefore, the Transition Town movement has the ability to popularize the academic discourse of degrowth.

The third and fourth subquestions – what are the differences of the two discourses and how can they be interpreted - can be answered by three statements. First, the degrowth discourse interacts with the public sphere as well as the Transition Town movement interacts with the academic sphere. Therefore, there is a high interaction between these two discourses also regarding generating knowledge and knowledge transfer as both discourses use and share new insights of and with each other. An unexpected finding is that the Transition Town movement is led by a scientist since this is hardly discussed in existing literature. Secondly, both discourses hardly diverge regarding their new ideas and concepts for the future. The only divergence exists because the degrowth discourse often illustrates abstract and highly theoretical concepts and the Transition Town movement connects abstract concepts always with practical examples. However, the new concepts and ideas of the future are similar and the two discourses merely use different words to explain them. Third, the messages of the degrowth discourse and the Transition Town movement diverge regarding their radicality and their complexity. The messages of the degrowth discourse are often more radical and complex than the ones of the Transition Town movement especially in the concepts of critiques of growth and development and meaning of life and well-being. Furthermore, the divergences between the two discourses often reason in the different audiences as the degrowth discourse mainly refer to other scientists and the activists of Transition Town movement want to motivate lay people with their messages.

All in all, the two discourses do not differ much which is unexpected due to the fact that in existing literature scientists always point out that the translation of scientific knowledge for a broader audience lead to lacks and failures.

5. Conclusion

This chapter aims to summarize the main findings, to give suggestions for future research and to present practical advices for implications. Thus, the chapter is divided in the three sections in which each of the three issues are discussed further. The first section answers the research question, the second section discusses suggestions for future research and the last section presents practical implications.

5.1. Answer of the Research Question

This section answers the main research question: In what ways do the degrowth discourse and the Transition Town movement diverge? First of all, it can be said that the two different discourses of degrowth do not diverge in many ways. The only ways in which the two discourses differ are that the scientists of degrowth discourse present their ideas and concepts more theoretical and more abstract than the Transition Town movement. The movement translates these ideas by using simpler words and by connecting always the theoretical concepts to practical implementation.

Moreover, the messages of the two discourses differ. While the scientists of the degrowth discourse often make radical and extreme statements especially when degrowth scientists criticize the concepts of growth and development, the Transition Town movement is often softer and less radical in its messages. Furthermore, the messages of the degrowth discourse are often more complex for example if they discuss the meaning of life and well-being, while the Transition Town movement simplifies its messages about this topic to social coherence and the community within the movement. This divergence leads to simplifications in the translation of the degrowth discourse through the Transition Town movement. Additionally, one can argue that the revolutionary thoughts of the degrowth discourse got lost in the translation through the Transition Town movement.

Reasons for these divergences might be the different audiences the two discourses have and the different goals they follow. Since the degrowth discourse takes place in the scientific sphere, degrowth scientists address to other scientists and they can therefore use more complex and radical concepts. Moreover, their goal is to struggle existing power structures in the academic sphere and to change existing traditions and concepts. Thus, radical and extreme messages are more effective than softer ones. The Transition Town movement, in contrast, talks to lay people who do not always understand complex relationships and interactions as they do not have the required expertise. Hence, the messages of the Transition Town movement have

to be less complex and more understandable to really motivate the audience to participate. Moreover, discussing these topics at the local level seems to be more attractive for potential members because it affects them and they have the expertise about the local situation. Furthermore, based on the different audiences the extent of radicalness and extremeness differs because the public can often feel overwhelmed and powerless if the messages are too extreme and too radical while the discussion in the scientific sphere becomes more concrete and interesting. These findings are discussed further regarding to suggestion for future research in the next section.

5.2. Suggestions for Future Research

This section refers to suggestions for future research which are based on the (unexpected) findings that are made in this research. Therefore, the section shortly connects the findings to existing theories and summarizes the unexpected findings which can be used for future research.

Concerning the aspect of popularization of science, the findings of this bachelor thesis confirm several existing theories. First of all, the research supports the theory by Hilgartner who disagrees with the dominant view theory and argues that generated knowledge is transferred in both direction to the movement as well to the academic discourse. This applies for the case of the degrowth discourse and the Transition Town movement. Therefore, this research once again proves that the dominant view is wrong in this point as the aspect of the dominant view, which states that knowledge is only transferred from the science to society, is not the case for degrowth. Secondly, the findings of Calsamiglia, who states that the two spheres start to blur and the borders become unclear between the scientific sphere and the public sphere, can be found in many different examples of the two cases. There are for example many communicative events that are organized by scientists who want to encourage the interaction with the public. Moreover, the aspect of the different focus between an academic discourse and a social movement by the theory according to Calsamiglia and van Dijk can be confirmed as well. The degrowth discourse has a greater focus on the option and its discovery while the Transition Town movement emphasizes the practical matters and the consequences for the daily lives.

Unexpected findings that can be used for future research can be summarized in two elements. The first one is that the Transition Town movement is led by a scientists which is hardly discussed in existing literature. Therefore, theories about popularization of science would benefit from research about how scientists within a movement improve the

popularization of scientific knowledge and ideas. Since the case of degrowth and Transition Towns has only a few divergences, it can be assumed that scientists within a movement have a positive impact regarding the popularization of academic discourses. Possible reasons might be that scientists in a movement know both spheres – the academic and the public one – and therefore have a better understanding how to translate academic concepts so that lay people understand the concepts without including failures. Another unexpected finding is that the Transition Town movement does not translate the radical and extreme messages of the degrowth discourse as the leading figure argues that such messages do not motivate people to participate. This finding needs to be analyzed further through other cases to support this argumentation. Since the bachelor thesis simply investigated in a case study, these new findings need to be proven for other cases as well in order to be treated as a general theory about popularization of science. Moreover, the case of degrowth needs to be further analyzed by using other examples for the degrowth movement to see how the translation of the scientific knowledge works in these cases. Furthermore, this bachelor thesis is limited to a certain time frame and to a certain amount of documents. Thus, future research about degrowth needs to be changed by using other and more data or to include for example expert interviews as well.

All in all, it can be concluded that there are still many aspects to research about the popularization of science in general and particularly for the case of degrowth as the popularization of science is an important aim for scientists.

5.3. Practical Implications

The last section is about practical implications. As the topic of popularization of science refers to scientists and activists of movements, the practical advices which are made refer to these two actors and not to actors in the political or media sphere.

First, a high interaction between scientists and activists of a movement often leads to better results of popularization of science. Therefore, since scientists want to popularize their ideas and increase their influence in the public sphere, especially scientists need to invest more time to interact with the public in order to improve the understanding about how scientific knowledge is understood by lay people. This change can be realized when scientists participate in movements or if they particularly analyze movements in ways of how activists use scientific knowledge. Secondly, participants of social movements need to open up their knowledge to the scientists as well so that scientists can get better insights and can learn from the movement. For example, the effect of sharing positive visions and stories that the Transition Town movement uses to motivate people can offer great insights to the scientists.

Another practical implication that needs to be improved is that scientists need to change in order to not only explain abstract ideas and concepts but translate them in practical implications as well. This needs to be changed given the fact that otherwise social movements can misinterpret the theoretical concepts and translate them into wrong practical implementations.

A last practical implication for scientists and activists of movements is that they need to pay more attention to the interaction between each other and no longer deny this interaction as existing research points out. This advice would improve the popularization of science once again since it would open up the perspective of both actors and more insights can become obvious.

All in all, the popularization of science is an extraordinary research topic that needs further investigation especially in the cases of environmental discourses. Moreover, the research of popularization of science still implies many possibilities for future research as the existing theories are limited in their messages and amount.

List of references

- Aigner, E., Ebinger, K., Gran, C., & Sommer, F. (2014). International Conference on Degrowth. In *Resume of the Observer Team* (p. 5). Leipzig.
- Alexander, S. (2013). Voluntary simplicity and the social reconstruction of law: Degrowth from the grassroots up. *Environmental Values*.
<https://doi.org/10.3197/096327113X13581561725356>
- Bauhardt, C. (2014). Solutions to the crisis? The Green New Deal, Degrowth, and the Solidarity Economy: Alternatives to the capitalist growth economy from an ecofeminist economics perspective. *Ecological Economics*.
<https://doi.org/10.1016/j.ecolecon.2014.03.015>
- Bergstrand, K. (2014). Cognitive Shocks: Scientific Discovery and Mobilization. *Science as Culture*. <https://doi.org/10.1080/09505431.2013.850471>
- Budapest, D. C. (2016). *Conference Report*. Budapest.
- Calsamiglia, H. (2018). Popularization discourse. *Narrative Voice in Popular Science in the British Press: A Corpus Analysis on the Construal of Attributed Meanings*, 5(2), 13–38.
<https://doi.org/10.2307/j.ctvgd2h5.4>
- Calsamiglia, H., & Van Dijk, T. A. (2004). Popularization discourse and knowledge about the genome. *Discourse and Society*. <https://doi.org/10.1177/0957926504043705>
- Chertkovskaya, E., Paulsson, A., Kallis, G., Barca, S., & D'Alisa, G. (2017). The Vocabulary of degrowth: A roundtable debate. Retrieved from
[https://estudogeral.uc.pt/bitstream/10316/41878/1/The vocabulary of degrowth A roundtable debate.pdf](https://estudogeral.uc.pt/bitstream/10316/41878/1/The%20vocabulary%20of%20degrowth%20A%20roundtable%20debate.pdf)
- Conference, E. D.-G. for E. S. and S. E. (2008). Declaration (p. 2). Paris.
- Cosme, I., Santos, R., & O'Neill, D. W. (2017). Assessing the degrowth discourse: A review and analysis of academic degrowth policy proposals. *Journal of Cleaner Production*.
<https://doi.org/10.1016/j.jclepro.2017.02.016>
- Demaria, F., Schneider, F., Sekulova, F., & Martinez-Alier, J. (2013). What is degrowth? from an activist slogan to a social movement. *Environmental Values*.
<https://doi.org/10.3197/096327113X13581561725194>
- Drews, S., Antal, M., & van den Bergh, J. C. J. M. (2018). Challenges in Assessing Public Opinion on Economic Growth Versus Environment: Considering European and US Data. *Ecological Economics*. <https://doi.org/10.1016/j.ecolecon.2017.11.006>
- Economic Degrowth for Ecological Sustainability and Social Equity, C. (2010). Degrowth Declaration Barcelona. Barcelona.

- Edgar, A. (2006). *Habermas. The Key Concepts*. (1st ed.). New York: Routledge.
- Escobar, A. (2015). Degrowth, postdevelopment, and transitions: a preliminary conversation. *Sustainability Science*. <https://doi.org/10.1007/s11625-015-0297-5>
- Frickel, S., & Gross, N. (2005). A general theory of scientific/intellectual movements. *American Sociological Review*. <https://doi.org/10.1177/000312240507000202>
- Gamson, W. A. (1989). Media Discourse and Public Opinion on Nuclear Power: A Constructionist Approach. *American Journal of Sociology*.
- Grundmann, R., & Cavaillé, J. P. (2000). Simplicity in science and its publics. *Science as Culture*. <https://doi.org/10.1080/713695251>
- Habermas, J. (1975). *Legitimation Crisis*. *Telos*. <https://doi.org/10.3817/0975025210>
- Hilgartner, S. (1990). The Dominant View of Popularization: Conceptual Problems, Political Uses. *Social Studies of Science*. <https://doi.org/10.1177/030631290020003006>
- Hopkins, R. (2008). The transition handbook: from oil dependency to local resilience. *UIT Cambridge Ltd*. <https://doi.org/10.1080/09581596.2010.507961>
- Hopkins, R. (2013). The Power of Just Doing Stuff. *Totnes: Green Books*.
- Hopkins, R. (2014). Transition Town is the practical Manifestation of a post-growth society.
- Hopkins, R. (2015). 21 Stories of Transition. How a Movement of Communities is coming together to reimagine and rebuild our World.
- Hopkins, R., & Thomas, M. (2016). The Essential Guide to Doing Transition. Getting Transition started in your street, community, town or organisation.
- Jamison, A. (2006). Social movements and science: Cultural appropriations of cognitive praxis. *Science as Culture*. <https://doi.org/10.1080/09505430500529722>
- Kallis, G. (2011). Methods: In defence of degrowth. *Ecological Economics*. <https://doi.org/10.1016/j.ecolecon.2010.12.007>
- Kallis, G., Kerschner, C., & Martinez-Alier, J. (2012). The economics of degrowth. *Ecological Economics*. <https://doi.org/10.1016/j.ecolecon.2012.08.017>
- Khmara, Y., & Kronenberg, J. (2018). Degrowth in business: An oxymoron or a viable business model for sustainability? *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2017.12.182>
- Latouche, S., & Macey, D. (2009). *Farewell to Growth*. Wiley. Retrieved from https://books.google.de/books?id=F3s42_0ZXn4C
- Lele, S., Brondízio, E., Byrne, J., Mace, G., & Martinez-Alier, J. (2018). *Rethinking Environmentalism: Linking Justice, Sustainability, and Diversity*.
- Martínez-Alier, J. (2012). Environmental Justice and Economic Degrowth: An Alliance

- between Two Movements. *Capitalism Nature Socialism*.
<https://doi.org/10.1080/10455752.2011.648839>
- Martínez-Alier, J., Pascual, U., Vivien, F. D., & Zaccai, E. (2010). Sustainable de-growth: Mapping the context, criticisms and future prospects of an emergent paradigm. *Ecological Economics*. <https://doi.org/10.1016/j.ecolecon.2010.04.017>
- May, T. (2012). *Contemporary Political Movements and the Thought of Jacques Rancière*. *Contemporary Political Movements and the Thought of Jacques Rancière*.
<https://doi.org/10.3366/edinburgh/9780748639823.001.0001>
- McCormick, S. (2007). Democratizing science movements: A new framework for mobilization and contestation. *Social Studies of Science*.
<https://doi.org/10.1177/0306312707076598>
- Myers, G. (2003). Discourse studies of scientific popularization: Questioning the boundaries. *Discourse Studies*. <https://doi.org/10.1177/1461445603005002006>
- Nicolosi, E., & Feola, G. (2016). Transition in place: Dynamics, possibilities, and constraints. *Geoforum*. <https://doi.org/10.1016/j.geoforum.2016.09.017>
- Pailloux, A. L. (2012). A place for everything and everything in its place: scales of power and appropriate size of political communities. In *Theme Democracy - Power and democracy* (p. 8). Venezia.
- Peterson, J. C., Cole, S., Jasanoff, S., Pinch, T., & Markle, G. E. (2006). Handbook of Science and Technology Studies. *Contemporary Sociology*. <https://doi.org/10.2307/2076663>
- Philipps, N., & Hardy, C. (2002). Discourse Analysis. Thousand Oaks, California: SAGE Publications, Inc. <https://doi.org/10.4135/9781412983921>
- Pickering, C. (2011). 7 Ingredients for just, fair and inclusive Transition.
- Reyes, A. (2011). Strategies of legitimization in political discourse: From words to actions. *Discourse and Society*. <https://doi.org/10.1177/0957926511419927>
- Schlosberg, D. (2013). Theorising environmental justice: The expanding sphere of a discourse. *Environmental Politics*. <https://doi.org/10.1080/09644016.2013.755387>
- Seyfang, G., & Haxeltine, A. (2012). Growing grassroots innovations: Exploring the role of community-based initiatives in governing sustainable energy transitions. *Environment and Planning C: Government and Policy*. <https://doi.org/10.1068/c10222>
- Taylor, J. (2015). How to guide - Events Toolkit for Transition Initiatives.
- Themes, M. (2019). Degrowth and Research. Retrieved from <https://degrowth.org>
- Transition Bielefeld. (2014). Why do you do Transition?
- Transition Milwaukee. (2013). Why do you do Transition.

- Transition Worthing. (2013). Why do you do Transition? Retrieved from
<https://transitionnetwork.org/about-the-movement/what-is-transition/why/>
- Vetter, A. (2018). The Matrix of Convivial Technology – Assessing technologies for
degrowth. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2017.02.195>
- Weiss, M., & Cattaneo, C. (2017). Degrowth – Taking Stock and Reviewing an Emerging
Academic Paradigm. *Ecological Economics*.
<https://doi.org/10.1016/j.ecolecon.2017.01.014>

Appendix

I. Data Collection

Data collection for the degrowth discourse:

- Aigner, E., Ebinger, K., Gran, C., & Sommer, F. (2014). International Conference on Degrowth. In *Resume of the Observer Team* (p. 5). Leipzig.
- Bauhardt, C. (2014). Solutions to the crisis? The Green New Deal, Degrowth, and the Solidarity Economy: Alternatives to the capitalist growth economy from an ecofeminist economics perspective. *Ecological Economics*. <https://doi.org/10.1016/j.ecolecon.2014.03.015>
- Biologhini, D., Forno, F., & Graziano, P. (2012). *Vivir", From Solidarity Economy to the "Buen. Venezia.*
- Boffi, M. (2012). *Degrowing politics: A new Model for Government and Participation*. Venezia.
- Budapest, D. C. (2016). *Conference Report*. Budapest.
- Conference, E. D.-G. for E. S. and S. E. (2008). Declaration (p. 2). Paris.
- Cosme, I., Santos, R., & O'Neill, D. W. (2017). Assessing the degrowth discourse: A review and analysis of academic degrowth policy proposals. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2017.02.016>
- De Padova, A. (2012). *Work less, earn less, be richer*. Venezia.
- De Salvo, G., & Tese, M. (2012). *Environmental Justice and Local Communities*. Venezia.
- Economic Degrowth for Ecological Sustainability and Social Equity, C. (2010). *Degrowth Declaration*. Barcelona. Barcelona.
- Ermano, P. (2012). *Welfare and degrowth: developing a caring system + Degrowth and vulnerable people: socio-political commitment in favor of transition*. Venezia.
- Kallis, G., Kerschner, C., & Martinez-Alier, J. (2012). The economics of degrowth. *Ecological Economics*. <https://doi.org/10.1016/j.ecolecon.2012.08.017>
- Khmara, Y., & Kronenberg, J. (2018). Degrowth in business: An oxymoron or a viable business model for sustainability? *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2017.12.182>
- Latouche, S., & Macey, D. (2009). *Farewell to Growth*. Wiley. Retrieved from https://books.google.de/books?id=F3s42_0ZXn4C
- Lele, S., Brondizio, E., Byrne, J., Mace, G., & Martinez-Alier, J. (2018). *Rethinking Environmentalism: Linking Justice, Sustainability, and Diversity*.
- Marshall, A. P., & O'Neill, D. W. (2018). The Bristol Pound: A Tool for Localisation? *Ecological Economics*. <https://doi.org/10.1016/j.ecolecon.2017.11.002>
- Pailloux, A. L. (2012). A place for everything and everything in its place: scales of power and appropriate size of political communities. In *Theme Democracy - Power and democracy* (p. 8). Venezia.
- Parodi, O., & Nierling, L. (2012). *Interdependencies of Technology and Degrowth - Some Cultural Foundations*. Venezia.
- Ruzzene, M. (2012). *Degrowth, the financial crisis of public economies and local currencies*. Venezia.
- Vetter, A. (2018). The Matrix of Convivial Technology – Assessing technologies for degrowth. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2017.02.195>
- Weiss, M., & Cattaneo, C. (2017). Degrowth – Taking Stock and Reviewing an Emerging Academic Paradigm. *Ecological Economics*. <https://doi.org/10.1016/j.ecolecon.2017.01.014>

List of data for the Transition Town movement:

- Hopkins, R. (2008). *The Transition Handbook: From Oil Dependency to Local Resilience* (1st Editio). Transition Books.
- Hopkins, R. (2009). *Transition to a world without oil*. TED Global: TED.com. Retrieved from https://www.ted.com/talks/rob_hopkins_transition_to_a_world_without_oil
- Hopkins, R. (2013). The Power of Just Doing Stuff. *Totnes: Green Books*.
- Hopkins, R. (2014). Transition Town is the practical Manifestation of a post-growth society.
- Hopkins, R. (2015). 21 Stories of Transition. How a Movment of Communities is coming together to reimagine and rebuild our World.
- Hopkins, R. (2017). Transition at 10 Years Old.
- Hopkins, R., & Thomas, M. (2016). The Essential Guide to Doing Transition. Getting Transition started in your street, community, town or organisation.
- Pickering, C. (2011). 7 Ingredients for just, fair and inclusive Transition.
- Taylor, J. (2015). How to guide - Events Toolkit for Transition Initiatives.
- Transition Bielefeld. (2014). Why do you do Transition?
- Transition Milwaukee. (2013). Why do you do Transition.
- Transition Worthing. (2013). Why do you do Transition? Retrieved from <https://transitionnetwork.org/about-the-movement/what-is-transition/why/>

II. Results of the Atlas.ti Analyses

Number of Citations in the documents for the discourse analysis

Years	Critiques of Growth and Development		Meaning of Life and Well-being		Bioeconomic	
	Relative	Absolute	Relative	Absolute	Relative	Absolute
2008-2012	69,16%	563	22,36%	182	22,11%	180
2013-2018	35,46%	1410	29,30%	1165	57,19%	2274
Zitate	41,19%	1973	28,12%	1347	51,23%	2454

Type of Source	Critiques of Growth and Development		Meaning of Life and Well-being		Bioeconomic	
	Relative	Absolute	Relative	Absolute	Relative	Absolute
Books	17,17%	479	33,94%	947	72,83%	2032
conferences	70,64%	296	22,91%	96	20,29%	85
Journals	75,77%	1198	19,23%	304	21,32%	337
Zitate	41,19%	1973	28,12%	1347	51,23%	2454

Table 1: The results of the Atlas.ti analyzes for the degrowth discourse

Findings of the Movement discourse analysis

Year	Critiques of Growth and Development		Meaning of Life and Well-being		Bioeconomic	
	Relative	Absolute	Relative	Absolute	Relative	Absolute
2008-2012	0,00%	0	44,00%	11	64,00%	16
2012-2018	10,85%	87	70,70%	567	26,18%	210
Zitate	10,52%	87	69,89%	578	27,33%	226

Type of Sources	Critiques of Growth and Development		Meaning of Life and Well-being		Bioeconomic	
	Relative	Absolute	Relative	Absolute	Relative	Absolute
Documents form the website	9,63%	71	71,23%	525	26,87%	198
Videos	17,78%	16	58,89%	53	31,11%	28
Zitate	10,52%	87	69,89%	578	27,33%	226

Table 2: the results of the Atlas.ti analysis for the Transition Town movement (without including the citations of the books)

III. Transcription of the videos used in the Analysis

I. Why do you do Transition?

Transition Network Website: <https://transitionnetwork.org/about-the-movement/what-is-transition/why/>

Video 1: Why do you do Transition? (Milwaukee, Wisconsin) – published on 20.10.2013

Woman 1: “The reason I love Transition is because I truly feel like – it helps me feel like that I am not alone and it allows me to see that we can make small changes in order to create the world that we want to see.”

Man 1: “I think that Transition is the most single, important thing we are going to do on the planet right now.”

Man 2: “The reason why I stay with Transition with the ups and downs is that I have twin two year old sons and think about their future in America and I think about the prospect of resource wars and I think about the prospect of climate change and I think about even the prospect of civil war in America and I think Transition is actually the only – it sounds – Transition itself sounds hopeful and optimistic and I think it is the only realistic approach to a sustainable future for my sons. So I am here because I want a Name of Son and Name of Son (not understandable) in a livable planet where they have purpose, health and community and peace.”

Man 1: “I mean there are a thousand different ways that describe Transition but I think the deepest is about continuing this revolutionary journey on the planet.”

Man 3: “I am very concerned about the environmental crisis and I would not study for – intensively – for about two three years and I come across the notion of Transition and I see the need for an ethical change among all peoples. Well, there are people so poor that no one can demand that of them. Ehm.. There is a need for an ethical change and this seems to be part of it.”

Woman 2: “I stop me for one of the most (not understandable) and challenging times – things I have done.”

Woman 1: “Transition Milwaukee and the Transition movement as a whole really helped me build relationships. I found my family and friends through Transition. I love the Transition movement because it focuses on the positive what we can do and I really like that quote and that it is not a protest or party so what we do is celebrate life and create ways to work together and share that love and care for each other, for the earth, for universe and things around us and how interconnected we are.”

Video 2: Why do you do Transition? (Bielefeld) – published on 06.07.2014

Woman 1: “Just connecting with people, just doing things like that, just finding people who are like mine and who really want change. That is what I get out of it and it’s beautiful.”

Man 1: “I getting to know many, many people and I am now doing the thing that I have been dreaming and doing for twenty years – at least.”

Woman 2: “Ja, dass man einfach wieder sieht wie die Leute wieder zusammenfinden, dass die Leute wieder miteinander was machen und nicht nur gegeneinander und sich versuchen auszustecken mit ihrem Konsum und was sie haben und was sie dadurch sein wollen.“

Woman 3 translates the messages of woman 2: „Yeah – it something – it is honest and it comes from people want to be with each other and not against each other. It is cooperation and not competition.”

Man 2: “I am a problem-solver so I love a challenge and I think we’ve got a really huge challenge ahead of us and yeah I try to do my part to find solutions.”

Man 3: “A lot of inspiration. A lot of inspiration and it is time that we live – it’s right thing to do.”

Man 4: “With Transition I get out of what we can call a real crises of civilizational crises, of climate change, of resources and I get an opportunity to actually connect more to other people, to nature.”

Man 5: “I meet a lot of wonderful people and I learn a lot. A learning experience and wonderful food out of gardens and support. Yeah like just good to know that I am not crazy that other people think the same line as I do.”

Man 6: “Yeah, for me it’s very inspiring to start something and it was a very good experience for me to see certain steps to make by myself.”

Man 7: “It’s a join to change things in my local area, to change things by my brain – brain is not the right word – by my my mind and to bring ah to bring change with me into the world. With me. It is the beginning with me.”

Video 3: Why do Transition? (Worthing) - published on 16.07.2013

Woman 1: “Why do I do it? Why am I part of it – is that what you mean?”

Man 1: “I find it is helpful to be able to know that I am enabling the (not understandable) a lot of people are doing here.”

Woman 2: “I get to know a lot of interesting people. I have a really good personal network, if I want something done, if I need something, I know a person that knows a person that knows a person that could get that done for me.”

Woman 1: “That is a very big question.”

Woman 3: “Because I believe that it could make a difference. I believe that small things could make a difference and I enjoy the set of community that I get from meeting people during similar sorts of things.”

Woman 4: “Because if always hate about the living world, a lot of people and I just want (not understandable) a lot of us to join that and doing things to help to get back in shapes and to get a future in it I expose.”

Woman 5: “First of all, I get to know people, get to live in community with my neighbors, with people in the same town. I learn a lot because as an office bomb I don’t really get out much during the week so I can actually be more outdoors, and a lot more community-growing about sustainable foods, about

using foods and have a bigger picture about being less oil dependent and more resilient as a local community.”

Woman 6: “ Not understandable – to noise in the background “

Man 1: “some fantastic stuff going on in the different groups - permaculture, community supporting agriculture, transportation group – they all doing interesting stuff and it’s – I mean I supporting that.”

Woman 1: “I am part of it because I am passionate about keeping things local. I am passionate about growing my own, about sharing my skills and about brining community together and I think they all cool things to do with the Transition movement and the Transition idea. And that is what I am believe in so that why I am here.”

II. TEDGlobal 2009: Rob Hopkins about “Transition to a world without oil”

Website link: https://www.ted.com/talks/rob_hopkins_transition_to_a_world_without_oil/transcript

As a culture, we tell ourselves lots of stories about the future, and where we might move forward from this point. Some of those stories are that somebody is just going to sort everything out for us. Other stories are that everything is on the verge of unraveling.

But I want to tell you a different story here today. Like all stories, it has a beginning. My work, for a long time, has been involved in education, in teaching people practical skills for sustainability, teaching people how to take responsibility for growing some of their own food, how to build buildings using local materials, how to generate their own energy, and so on.

I lived in Ireland, built the first straw-bale houses in Ireland, and some cob buildings and all this kind of thing. But all my work for many years was focused around the idea that sustainability means basically looking at the globalized economic growth model, and moderating what comes in at one end, and moderating the outputs at the other end. And then I came into contact with a way of looking at things which actually changed that profoundly.

And in order to introduce you to that, I've got something here that I'm going to unveil, which is one of the great marvels of the modern age. And it's something so astounding and so astonishing that I think maybe as I remove this cloth a suitable gasp of amazement might be appropriate. If you could help me with that it would be fantastic. (Laughter) This is a liter of oil.

This bottle of oil, distilled over a hundred million years of geological time, ancient sunlight, contains the energy equivalent of about five weeks hard human manual labor -- equivalent to about 35 strong people coming round and working for you. We can turn it into a dazzling array of materials, medicine, modern clothing, laptops, a whole range of different things. It gives us an energy return that's unimaginable, historically. We've based the design of our settlements, our business models, our transport plans, even the idea of economic growth, some would argue, on the assumption that we will have this in perpetuity.

Yet, when we take a step back, and look over the span of history, at what we might call the petroleum interval, it's a short period in history where we've discovered this extraordinary material, and then based a whole way of life around it. But as we straddle the top of this energy mountain, at this stage, we move from a time where our economic success, our sense of individual prowess and well-being is directly linked to how much of this we consume, to a time when actually our degree of oil dependency is our degree of vulnerability.

And it's increasingly clear that we aren't going to be able to rely on the fact that we're going to have this at our disposal forever. For every four barrels of oil that we consume, we only discover one. And that gap continues to widen. There is also the fact that the amount of energy that we get back from the oil that we discover is falling. In the 1930s we got 100 units of energy back for every one that we put in to extract it. Completely unprecedented, historically. Already that's fallen to about 11. And that's why, now, the new breakthroughs, the new frontiers in terms of oil extraction are scrambling about in Alberta, or at the bottom of the oceans.

There are 98 oil-producing nations in the world. But of those, 65 have already passed their peak. The moment when the world on average passes this peak, people wonder when that's going to happen. And there is an emerging case that maybe that was what happened last July when the oil prices were so high. But are we to assume that the same brilliance and creativity and adaptability that got us up to the top of that energy mountain in the first place is somehow mysteriously going to evaporate when we have to design a creative way back down the other side? No. But the thinking that we have to come up with has to be based on a realistic assessment of where we are.

There is also the issue of climate change, is the other thing that underpins this transition approach. But the thing that I notice, as I talk to climate scientists, is the increasingly terrified look they have in their eyes, as the data that's coming in, which is far ahead of what the IPCC are talking about. So the IPCC said that we might see significant breakup of the arctic ice in 2100, in their worst case scenario. Actually, if current trends continue, it could all be gone in five or 10 years' time. If just three percent of the carbon locked up in the arctic permafrost is released as the world warms, it would offset all the savings that we need to make, in carbon, over the next 40 years to avoid runaway climate change. We have no choice other than deep and urgent decarbonization.

But I'm always very interested to think about what might the stories be that the generations further down the slope from us are going to tell about us. "The generation that lived at the top of the mountain, that partied so hard, and so abused its inheritance." And one of the ways I like to do that is to look back at the stories people used to tell before we had cheap oil, before we had fossil fuels, and people relied on their own muscle, animal muscle energy, or a little bit of wind, little bit of water energy.

We had stories like "The Seven-League Boots": the giant who had these boots, where, once you put them on, with every stride you could cover seven leagues, or 21 miles, a kind of travel completely unimaginable to people without that kind of energy at their disposal.

Stories like The Magic Porridge Pot, where you had a pot where if you knew the magic words, this pot would just make as much food as you liked, without you having to do any work, provided you could remember the other magic word to stop it making porridge. Otherwise you'd flood your entire town with warm porridge.

There is the story of "The Elves and the Shoemaker." The people who make shoes go to sleep, wake up in the morning, and all the shoes are magically made for them. It's something that was unimaginable to people then.

Now we have the seven-league boots in the form of Ryanair and Easyjet. We have the magic porridge pot in the form of Walmart and Tesco. And we have the elves in the form of China. But we don't appreciate what an astonishing thing that has been.

And what are the stories that we tell ourselves now, as we look forward about where we're going to go. And I would argue that there are four. There is the idea of business as usual, that the future will be like the present, just more of it. But as we've seen over the last year, I think that's an idea that is increasingly coming into question. And in terms of climate change, is something that is not actually feasible.

There is the idea of hitting the wall, that actually somehow everything is so fragile that it might just all unravel and collapse. This is a popular story in some places. The third story is the idea that technology can solve everything, that technology can somehow get us through this completely.

And it's an idea that I think is very prevalent at these TED Talks, the idea that we can invent our way out of a profound economic and energy crisis, that a move to a knowledge economy can somehow neatly sidestep those energy constraints, the idea that we'll discover some fabulous new source of energy that will mean we can sweep all concerns about energy security to one side, the idea that we can step off neatly onto a completely renewable world.

But the world isn't Second Life. We can't create new land and new energy systems at the click of a mouse. And as we sit, exchanging free ideas with each other, there are still people mining coal in order to power the servers, extracting the minerals to make all of those things. The breakfast that we eat as we sit down to check our email in the morning is still transported at great distances, usually at the expense of the local, more resilient food systems that would have supplied that in the past, which we've so effectively devalued and dismantled.

We can be astonishingly inventive and creative. But we also live in a world with very real constraints and demands. Energy and technology are not the same thing. What I'm involved with is the transition response. And this is really about looking the challenges of peak oil and climate change square in the face, and responding with a creativity and an adaptability and an imagination that we really need. It's something which has spread incredibly fast. And it is something which has several characteristics.

It's viral. It seems to spread under the radar very, very quickly. It's open source. It's something which everybody who's involved with it develops and passes on as they work with it. It's self-organizing. There is no great central organization that pushes this; people just pick up an idea and they run with it, and

they implement it where they are. It's solutions-focused. It's very much looking at what people can do where they are, to respond to this. It's sensitive to place and to scale.

Transitional is completely different. Transition groups in Chile, transition groups in the U.S., transition groups here, what they're doing looks very different in every place that you go to. It learns very much from its mistakes. And it feels historic. It tries to create a sense that this is a historic opportunity to do something really extraordinary. And it's a process which is really joyful. People have a huge amount of fun doing this, reconnecting with other people as they do it. One of the things that underpins it is this idea of resilience.

And I think, in many ways, the idea of resilience is a more useful concept than the idea of sustainability. The idea of resilience comes from the study of ecology. And it's really about how systems, settlements, withstand shock from the outside. When they encounter shock from the outside that they don't just unravel and fall to pieces. And I think it's a more useful concept than sustainability, as I said.

When our supermarkets have only two or three days' worth of food in them at any one time, often sustainability tends to focus on the energy efficiency of the freezers and on the packaging that the lettuces are wrapped up in. Looking through the lens of resilience, we really question how we've let ourselves get into a situation that's so vulnerable. Resilience runs much deeper: it's about building modularity into what we do, building surge breakers into how we organize the basic things that support us.

This is a photograph of the Bristol and District Market Gardeners Association, in 1897. This is at a time when the city of Bristol, which is quite close to here, was surrounded by commercial market gardens, which provided a significant amount of the food that was consumed in the town, and created a lot of employment for people, as well. There was a degree of resilience, if you like, at that time, which we can now only look back on with envy.

So how does this transition idea work? So basically, you have a group of people who are excited by the idea. They pick up some of the tools that we've developed. They start to run an awareness-raising program looking at how this might actually work in the town. They show films, they give talks, and so on. It's a process which is playful and creative and informative. Then they start to form working groups, looking at different aspects of this, and then from that, there emerge a whole lot of projects which then the transition project itself starts to support and enable.

So it started out with some work I was involved in in Ireland, where I was teaching, and has since spread. There are now over 200 formal transition projects. And there are thousands of others who are at what we call the mulling stage. They are mulling whether they're going to take it further. And actually a lot of them are doing huge amounts of stuff. But what do they actually do? You know, it's a kind of nice idea, but what do they actually do on the ground?

Well, I think it's really important to make the point that actually you know, this isn't something which is going to do everything on its own. We need international legislation from Copenhagen and so on. We

need national responses. We need local government responses. But all of those things are going to be much easier if we have communities that are vibrant and coming up with ideas and leading from the front, making unelectable policies electable, over the next 5 to 10 years.

Some of the things that emerge from it are local food projects, like community-supported agriculture schemes, urban food production, creating local food directories, and so on. A lot of places now are starting to set up their own energy companies, community-owned energy companies, where the community can invest money into itself, to start putting in place the kind of renewable energy infrastructure that we need. A lot of places are working with their local schools. Newent in the Forest of Dean: big polytunnel they built for the school; the kids are learning how to grow food. Promoting recycling, things like garden-share, that matches up people who don't have a garden who would like to grow food, with people who have gardens they aren't using anymore. Planting productive trees throughout urban spaces. And also starting to play around with the idea of alternative currencies.

This is Lewes in Sussex, who have recently launched the Lewes Pound, a currency that you can only spend within the town, as a way of starting to cycle money within the local economy. You take it anywhere else, it's not worth anything. But actually within the town you start to create these economic cycles much more effectively.

Another thing that they do is what we call an energy descent plan, which is basically to develop a plan B for the town. Most of our local authorities, when they sit down to plan for the next five, 10, 15, 20 years of a community, still start by assuming that there will be more energy, more cars, more housing, more jobs, more growth, and so on. What does it look like if that's not the case? And how can we embrace that and actually come up with something that was actually more likely to sustain everybody? As a friend of mine says, "Life is a series of things you're not quite ready for." And that's certainly been my experience with transition. From three years ago, it just being an idea, this has become something that has virally swept around the world. We're getting a lot of interest from government. Ed Miliband, the energy minister of this country, was invited to come to our recent conference as a keynote listener. Which he did -- (Laughter) (Applause) -- and has since become a great advocate of the whole idea.

There are now two local authorities in this country who have declared themselves transitional local authorities, Leicestershire and Somerset. And in Stroud, the transition group there, in effect, wrote the local government's food plan. And the head of the council said, "If we didn't have Transition Stroud, we would have to invent all of that community infrastructure for the first time." As we see the spread of it, we see national hubs emerging.

In Scotland, the Scottish government's climate change fund has funded Transition Scotland as a national organization supporting the spread of this. And we see it all over the place as well now. But the key to transition is thinking not that we have to change everything now, but that things are already inevitably changing, and what we need to do is to work creatively with that, based on asking the right questions.

I think I'd like to just return at the end to the idea of stories. Because I think stories are vital here. And actually the stories that we tell ourselves, we have a huge dearth of stories about how to move forward creatively from here. And one of the key things that transition does is to pull those stories out of what people are doing. Stories about the community that's produced its own 21 pound note, for example, the school that's turned its car park into a food garden, the community that's founded its own energy company. And for me, one of the great stories recently was the Obamas digging up the south lawn of the White House to create a vegetable garden. Because the last time that was done, when Eleanor Roosevelt did it, it led to the creation of 20 million vegetable gardens across the United States.

So the question I'd like to leave you with, really, is -- for all aspects of the things that your community needs in order to thrive, how can it be done in such a way that drastically reduces its carbon emissions, while also building resilience?

Personally, I feel enormously grateful to have lived through the age of cheap oil. I've been astonishingly lucky, we've been astonishingly lucky. But let us honor what it has bought us, and move forward from this point. Because if we cling to it, and continue to assume that it can underpin our choices, the future that it presents to us is one which is really unmanageable. And by loving and leaving all that oil has done for us, and that the Oil Age has done for us, we are able to then begin the creation of a world which is more resilient, more nourishing, and in which, we find ourselves fitter, more skilled and more connected to each other. Thank you very much. (Applause)

III. Video: Rob Hopkins, "Transition at 10 Years Old"

Website Link: <https://www.youtube.com/watch?v=Tt4Cn0AS2WI> published on 08.08.2017

Rob Hopkins: "Hello good people of Transition US. This is Rob Hopkins speaking to you from Totness. Sorry, I can't be there in person as you know I don't fly and in doing so I think I probably saved hundreds of tons of carbons sitting on varies trains scrolling across Europe and I would have done this live but I wouldn't ending up with me in a situation ... aahhh.... Dududu.... And the usual sort of stuff that can go wrong with skype. So, we gone do it like this and I put some slights in and I hope this is a useful contribution to your – what looks like a wonderful conference. So before we start. I think it is time for a commercial break and I like to you show you this short advert staring to people. Let's call them Dave and Doris.

Commercial break: advert spot by amazondash wand (summary: two people who want to cook a meal and show how amazondash wand supports their life by buying food there, by getting a recipe, by dimming the light etc.) – Say it. Scan it. Ask Alexa

Rob Hopkins: “So the first thing that strike me when I watched that video is: Dave turn your own lights on and off. People have been doing this for decades. You just turn that switch in the wall. And why is Doris somebody who is professional in her early 40s and managed to get to that point in her life so deskilled that even making for her dinner party what is particle heath up pasta with tomato source out of a And scrimps on top. She has to go to Amazon to get the recipe. She didn’t have any family, any friends around she can ask. She seems to have no cook books in her house and it seems to be actually – I have a deep distrust in anybody with a kitchen that tiny in films. I don’t think that she has ever cooked in that kitchen or done anything particular.

But the main thing that is really troubling about Dave and Doris and their kitchen planning their party is that they are so isolated. This is the civilization we live in now, where they can do all of their shopping in the week with the Alexia pen thing without having talked to anybody. They don’t have to go done the corner shops to risk having a conversation with another human being. We know that we have what we call an epidemic of loneliness now where people don’t interact, where can do all of their shopping without speaking to anybody and that is really really dangerous. Also the amounts of time that Dave and Doris spending online in order to make this happen. This is really, really bad. We know the more time we spending online, the lonelier we get, the more depressed we get, there are increased risks of mental health problems there is. We know for every hour we spending online, we become five percent more removed and detached from our families, friends and our loved ones. When I look at that advert – actually, I think more about the world around them. If we all lived like Dave and Doris in their remarkable spotless clean kitchen, what’s is going in the world around. When they step out of the door. They step out into a world where there is no local economy or whatsoever which is complete destroyed by Amazon, where agriculture is behaving in a complete different way purely to defied the lowest, lowest prices paid by Amazon. They live in a world where everybody is increasingly isolated. People don’t meet to share recipes, to share food, to share the food, to share the food, traditions of their own culture. People are isolated in their own places – eating whatever Amazon suggest what they eat. That is really, really hilarious.

So what I wane do really as you all know, we have been involved in an experiment over the last ten years to tell a different story about the future. Because that story in that video is very powerful narrative currently in our society. And it is a really, really terrifying one – I think – thought through in its implications. What we’ve been doing is to tell a different story. And what I wane do, is to run through some of our learnings and to tell you some better stories from the Transition movement.

So I want to start with this which is a thing that we created to for cop 21 in Paris in December 25. We call it: Transition Manifesto. And it drew on some of the key things that we’ve really been doing and learning from Transition as we go along. I just gone pick out some of the things to talk a bit more about them.

So the first thing is “Seize the opportunities that present themselves” and this picture is of a bottle of beer that is produced here in Totness by a craft brewery that we established here as a sort of embodiment

of transition local economy thinking called the new Lyon brewery. And the picture you're seeing there is of a beer that we made that was called the Miller's brew using locally grown spouts to celebrate the launch of a project called grown in Totness which is the first time this town has a mill for about a hundred years. They raised 26 and a half thousand pounds in a crowd funder in order to in order to put the mill back. And when I went down for their launch and this is a picture of Holly Tiffin who is the who started the whole project and runs a who's brilliant. And I went down to the launch that they did where they invited all the people who supported the crowdfunder to come along and see what they were doing. I was really struck with the thought that the shift from a kind of diverse interconnected and more resilient economy over the last 50 years to the increase monocultural one we see today has been a process of destroying all the small, destroying the diversity to strung the artisans the craftsmanship as it gets narrowed down into the kind of Amazon vision of the future where they even tell you the recipes before you start cooking. Actually, what we see when we turn it the other way around as you're doing as many transition groups now 50 countries around the world of people doing transition. What we start to see is it what it looks like when it starts to go the other way and the way I like to think about it, it's like when we stop interfering with with a piece of ground, we stop mowing the grass we just leave it. And we have this process of it's starting to turn back into the forest where first come to the pioneer plants the weeds then comes the scrub then come the trees we have a process where what nature wants to do if we just leave it is to move towards diversity, towards abundance, towards complexity. What we keep doing is is dumbing it down and stopping that from happening so it takes a huge amount of energy to move towards the Amazon model because actually that's completely unnatural and that's not instinctive what you see when you start to move the other direction with us so exiting and gives me so much hope is you start to see that complexity, that diversity kind of building on itself, feeding on itself you get these positive cycles. So she started milling grains again. We can now buy local flour, local oatmeal, we then start to brew with those we make stout using Totnes and produced oats we make beer using spelt be using einkorn these different kinds of grains that then feeds an interest in us saying so where could we get local hops from there's now somebody started growing hops on the edge of Totnes. Where could we get such-and-such from, you know it all starts to feed. And you see this with the craft beer the local food movement in the US as well it's really, really exciting so for me there's that thing as saying there are so many opportunities there when we can put our transition glasses on that we can look through we can see what's happening and we can start to tell the stories about what that looks like in practice.

So the second one I would say is "Be creative, playful and open". And it's one of the things that has been so delightful so observe about the transition movement over the last 10 or 11 years and last weekend I was up in London in Tooting where transition time tooting who are one of the projects who do such amazing stuff with brining arts and creativity into what they do did this thing called the Tooting twirl. We're in right Tooting is basically a high street through London and houses off and shops off that they don't have like a green or a community space but right in the heart of Tooting there is a bus turning circle. Just a big rail area where buses wait and idle their engines. Right next to people's homes the air

pollution issues are really, really bad. So they created what they call a pop-up village green all based around the idea of what if, what is and those are two such powerful words that are really underpin transition from the beginning. What if we printed our own money? What if we turned that place into a garden? What if and always followed up with well let's try why not, let's give it a go. So in Tooting they created a pop-up village green literally they put grass down on the road and they had music. And they had stalls and they had all kinds of stuff and it was just fantastic and it gave people a sense of what's possible. They that they saw that space for the first time in their lives in a completely different way and I really wouldn't be surprised if I went back in five years' time and that space had become a village green.

The next one I call "Put care at the centre". And it's been one of them really fascinating shifts over the last few years of Transition is to say actually maybe it's not all right just to say what we think this place needs is to cut its carbon emissions to be more resilient but to start by going to the place and saying what do you need and how can we meet that in a way that really builds resilience here. And how can we put care at the centre. How we look after each other? How we communicate with each other? This is a project in Neil Wigan in the North of England called green slate farm where the transition group took over a farm that had been run by the local government who didn't want it anymore. They bought it into community ownership and they created it's a care farm so they're taking on a lot of the services that the local councils didn't want to do anyone. So they provide a lot of care for different people who come there get lots of support. They also learn to grow food. They've built a straw bale kitchen. People learn how to grow food. People get affordable meals there. You know we can provide care for the people around us so much better than the local government and national government can. And there's so much that we can do by stepping up into that as well I think.

The next one is "invest in your community". And invest in your community is something that that we see increasingly you know when, when, when it becomes very volatile the idea that we would put money in a bank or we would put money – You know we see all the horrible things that are done with that and the divestment movement has been so powerful in terms of starting to change those stories and the people that standing back in the work and the work they've done encouraging divestment from those companies but we can do that every day in terms of how we, how we decide to invest any money that we might have and some of them really fascinating things in transitions have been when people have set things up that people have been able to invest into this in bath and West Community Energy community owned energy company that came out of transition bath and transition caution. They've now raised about thirty million pounds in investment from local people to fund a whole wide range of renewable energy projects that are all in community ownership or generating turnover for more projects. You know there is a new economy – a new economic model being developed here and this one that's very, very exciting, I think.

"Enable community ownership of assets" – How can we as a communities own things, places, buildings, infrastructure, businesses and, and there are lots of really good examples of that starting to happen now.

This is here in Totness where we recently got plenary permission for something which called transition homes which would be 27 straw bale homes. The biggest single straw bale development in the country which will be built as training for people. And we'll all be in community ownership and we'll all be held as affordable housing and I love the ambition now that transition groups are starting to look and become housing developers, become energy companies, all of that stuff is really important. The thing about transition homes is – you know – sometimes the things that we imagine are the manifestation of transition. When people come here to Totness for example, the stuff they expect to see the super swanky amazing eco homes or the big massive renewable energy projects. Those things – I'm sure some of you know – take a lot of time and a lot of stamina and, and I have nothing but the most enormous respect for the people who've got projects like Transition homes which have taken eight years to get to the stage of planning permission which makes me think that actually one of the real qualities of doing transition is a kind of deep stubbornness and a recognition that the projects that we're doing are something that we will be doing for the next 5 until 10 years of our life. There is a kind of level of commitment of I'm gonna see this happen and I love to see that deep kind of stubbornness. I think it's a really powerful quality.

Another part of it is “keep telling great stories”. For me one of the most powerful things about transition is the story that it tells. The stories we can tell about the place where this has happened. The place where that happened. A lot of my role really over the last 11 years has been just telling stories and hearing stories from one place and taking them to – so a sort of cross pollinating story. And this is a story that I really love from London where a guy called Leo who worked as a sustainability consultant and he was always busy and rushing around with his mobile phone and hurt his foot and had to spend three months with his foot in plaster and he had to take three months off work. And just all he could do to convalesce was just walk very slowly around in his neighborhood in London. And around that time he read a story in the paper about an old woman who lived in Bournemouth – I think it was – who died in her flat and nobody found her for nine years. And this really got him thinking about – Well, if I died in my flat who would even know. I don't even know anybody on my street at all. And one day – and he was walking around very slowly, taking in his neighborhood for the first time really. In any kind of depth he noticed there were lots of grapes being grown in different parts of this neighborhood in London. And one day when he was walking in the park on a whim he asked an old – an older gentleman in front of him, if he had ever made wine and this man replied to him: My friend – the soles of my feet are still purple from the first 29 years of my life where I trod my grapes. He was Italian and, and so they started working together on this idea of what would it look like if we made some wine in this street. They both lived on the same street. So one day they set up in the middle of the street and like a pit for treading grapes and invited everybody from the street to come and be part of the whole process. He met all of his neighbors for the first time and they produced that wine which they call unthinkable drinkable. The wine is absolutely disgusting but that's really not the point. The point is, it's about bring people together, that they now do this every year. I think the wine has got slightly better but not much.

Another one is “weave your community together”. And that’s one of the things that I love to see happening in transition. And I see it here, those, those clever ways of bringing people together enabling conversation. The decline of conversation is one of the most troubling trends in, in our society today – I think. And, and I love to see when that happens and this is an amazing place in the northeast of France called Ungesheim in Alsace where, which I visited a couple of years ago. And as now – there’s now a film made about it in France. It’s become quite a celebrity. They have a mayor that is called Jean Claude (not understandable name) who watched in Transition 2.0 and said we’ll do that all of that. And they’re doing the most remarkable stuff. They started the biggest solar farm in that region of France 5.3 megawatts. They’ve launched a local currency called the radish. They changed all the street lighting to low energy lighting. The swimming pool is heated by solar energy. They changed so that all the food served in the school and in the local council buildings is now organic. They created a new 8 hectare market garden to grow that food, training local young people to become market gardeners. They built this beautiful building – you can see here – out of local materials as a place that process that food and to create more jobs out of it. They built a straw bale cohousing project. They’ve created about a hundred jobs. They saved about 600 tons of carbon a year. It is the really most fantastic project and when I went there, they had sold a school bus and bought a horse which you can see in the middle here and when I gave a talk an old man came up to me and said: “Robbie all this transition stuff is great but that horse is a bit much”. And I said: “what do you mean the horse a little bit much?” – “Well, the horse feels that we’re going backwards.” – I said: “But doesn’t really know if I saw the kids going to school today and there was a magic in that experience for them have been taken to school like that.” But when you watch the film about Ungesheim, the most important thing that you see is not the 21 projects that were started in Ungesheim. What you see is the connections of people coming back together again – saying I felt so lonely, so isolated. Now, I feel part of something. You see this sort of community reweaving itself back together again. It always makes me wonder whether we should replace growth domestic product as a measure of our economic success with actually a measure of how many children are playing in the streets, and how many times we have meals in each other’s houses.

The next one is “Turn needs into opportunities”. You know – if we look around at the place where we live. There’s so much that needs doing that we can feel overwhelmed. We can feel despondent. We can feel isolated. Well, all of those are an opportunity to really approach them in a very different way. And to create extraordinary things I think. This is a street in Brussels where which is the red – in the red-light district – area of Brussels. The families who live on this side of this street live with many of the challenges that living alongside prostitution brings for people and families. And they suffered for years with men all night driving up and down the street looking for women and so on. And so one day the council announced that they were going to put these two blocks of concrete you can see in the picture here – to block off the road to stop that happening. The transition group who many of whom lived on that street said: “we can do a bit better than that”. So they asked if they could make a garden. The council gave them money for the materials. The people came out of their houses and built this garden. Now, this

garden is not going to feed this street. It's not going to feed one person. Each family has a meter square patch in it. What it does is, it brings people together for the first time. It changes the space. It changes the way people think about it. People told me that this is a place where you would never stand still here. You would put your collar up and you would walk quite quickly. Now people hang out here. When people go out and start working in the garden. Children come out and start playing in the street. Never ever happen before. They told me that one day they were there and a tour guide turned up with the whole load – with one of those very tall flags and a whole load of tourists and I said: well, you are now a vegetable tourism destination. That's why." So, so these kind of projects are really, really important because they bring people together to change the story about a space and to give people the confidence to go on and do other things which is perhaps the most important thing about them.

The last thing which I think, really feeds into your event and that I would like to pull out from our manifesto is "Celebrate often". Because what you have all achieved and what you've all done over the last 10 years in your places – far flung across the US and elsewhere of trying to kindle this transition flame into being is just so wonderful. And we can, we and, we work so hard and we so seldom stop to celebrate to pat each other on the back and to reflect: How's this going? How could we do this better? But stop and celebrating is really vital. Transition Town Louis is one of the very, very first transition groups to start here. This is their really remarkable birthday cake that they made to celebrate their, their recent 10th birthday celebrations complete with a marzipan windmill, solar panels, Louis pound flag, vegetable boxes, all kinds of different things. You know what I love about transition is, it's a movement that is learning how to celebrate and how to really weave that into everything – into every meeting we should have some degree of celebration. What I've loved about working with you the last two months or whatever has been. How you do this – How you do that. So I really hope that into your event and into everything that you've do. There's really some time for celebration because what you've achieved so far is really extraordinary.

And I am sure, I'm sure I'm over time so just want to leave you with, with one last imagine. I travel around a lot as I said by train and I was in Copenhagen recently in Denmark for a fantastic event with transition groups there. And when I was there I saw this and I thought I need to take a photograph of that. Because you know we live in a time where we have amazing path designers – you know. We have people who design paths for us to walk along and they're very well trained and they've studied path design at university and they really know their path design. And they're really good at designing the best paths but actually we're actually better at designing the paths that we should be walking on. This photo is beautiful for me in terms of: "If you don't like the path that's presented to you walk on – just make your own path. Just head out other people will follow and my hope is and what we start to see happening in places now is the path that we create by just setting off deciding to walk those paths they become the paths – because they're the paths that meet our needs better. They're the path by people who understand the place, the needs of the place. You are the best path designers in America. You know in terms of creating where, where your communities can go and what they can achieve.

So I have nothing but, but gratitude and admiration for the work that you've been doing, for the organizers of your fantastic conference. I wish you all the very, very best and all strength and solidarity in the next 10 years of transition in the US. I so look forward to hearing your stories and I have loved hearing them all so far.

Thank you so much and see you again soon.

IV. Rob Hopkins: transition Town is the practical manifestation of a postgrowth society

Website Link: <https://www.degrowth.info/en/2014/07/rob-hopkins-transition-town-is-the-practical-manifestation-of-a-postgrowth-society/> Video published in 2014, Conference in Leipzig

Question: How do you see the interaction between the transition and degrowth movements?

Rob Hopkins: "I think there are many of overlaps between the Transition movement and the degrowth movement. And I went to degrowth conference in 2012 – I think – in Venezia. And it was very, very interesting. I think that one of the differences is, that the degrowth movement takes a position that growth is inherently a bad thing, where in the Transition movement we take more of a position that it is a – more inappropriate thing. It is a 20th century idea and the challenges of the 21st century are very, very different. They are about: How do we live in a world with depleting energy, of contracting economy, of really need to take climate change seriously. So for me there a lot's of overlaps between degrowth and transition. I like to think that from my experience from the conference in Venezia, the degrowth movement is often more of a philosophical movement, while Transition is more of a practical, applied movement. Maybe, Maybe you can think of Transition as a more practicable, of a more manifestation of the idea of what a post-growth economy would actually look like in practice."

Question: What is the role of the Transition movement in face of the debt crisis?

Rob Hopkins: "The posterity matters which we currently seen which is affecting communities all around the world. And I think the way that the left often respond to that is the thing that they say there is no need of any cuts in spending. We need to do anything and this idea the left often tends to say: Just borrow more money from the future in order to try to make growth happen again. And the right tends to say: "everything to happen growth again, is to cut everything. And then we have economic growth again". But both are floured approaches because they are based on the understanding that what we need to do, is go back to economic growth. And actually when I look – of course – on growth and what growth actually mean is: social inequality, increased carbon emissions, and so one and so one. So finding what a post-growth economy look like is gonne be really, really important. And in countries which are hit very hard by austerity so there is – there are lots of transition groups. You know – in Spain and in Italy. And in Portugal. And they really try to look at the resources that they already have in their community and how they can use the resources in a different way so that they can actually mobilize what they have. But actually looking at a different module than expecting someone coming from the outside and rescue

their local economy. Maybe, they can look it at a different way. And actually where they can spend their local money, and have a more cooperative sharing in economy. And we actually start to see that on the ground.”

Question: How can Transition initiatives counter the argument of job creation through polluting activities?

Rob Hopkins: “I think the argument that because something creates jobs is a good thing. It’s a really important thing that we need to challenges. Yeah – you know, nuclear weapons create jobs, Tabaco create jobs, but actually if - what I see in transitions is actually that people looking at the kind of jobs we have, and we create them in very different way. So what we’ve seen from a lots of different transition groups now is starting to look at not only at how to they do small things in their community. But how do they actually start to rethink and remand the economy in the places where they live. How do they become an incubator for new social enterprises, new businesses, and new way of looking at that. Actually creating the economy case now to say – transition is a form of economic development. We can show that know. And actually, relocalized economies can do that. Because if you have a waste incinerator that employing a lot’s of people then that is one thing. But actually you can working in the local economy – creating a lots of jobs in lots of different ways so that if the incinerator goes, it’s not such a shock for everybody. Often, in our local economies we have a sort of monoculture economy where you have one big employer, which we see in the communities that make steer or coal, when the employers go it is absolutely demonstrating. So the work that we can do is diversifying that economy, bring in community energy projects, bring in local food projects, bringing in incubators for new enterprises, bringing in new resources like local currencies that enables that money to cycle locally as much as they can. It’s a really powerful way to build a parallel economy so when that monocultural economies start to falter you’ve got something else you can step of on to.”

Question: How does the idea of a more localized, green economy actually challenge the current growth paradigm?

Rob Hopkins: “I think that the economy we trying to create at a local scale needs to build on a few distinct values. So it needs to be making the local economy more resilience, it needs to be more local open in everything that it does, it needs to be about an appropriate way of localization. Because not every town or city is able to produce everything – it is not about self-sufficiency. But there are things that makes sense to bring closer to home: food, energy generation, building materials can much closer to home. It’s something that also recognizes that businesses, enterprises we have, should do more than generating money for profit stakeholders. They need to have some source of social values as well and where possible bringing assets into the community so that the community is more economically in charged about its future, of its destiny. I think when you look at having all those thing in place – that is what the new economy is founded on – on the local scale, on the local level. And actually you may have a successful local economy, but it’s key driver is not growth. It’s key driver is growing happiness and community, and friendship, and collectivity, and skills and that kind of. We can grow as long as we like.

But actually what I think, we gone try to get away from is growth in international capital, and so one and so one. And the argument that actually many of the business that currently define our local economies that are big, big chain businesses often imagine by government to be the desired thing. Actually they are an extractive industry. That exist as a big letch in the middle of a community that extracts wealth and resources in the community often to distant shareholders. If we have an economy where there is more ownership of it, the money can cycle more locally and can really innovate much more at the local scale. And I think, we may even see growth at the local scale but we move away from what define why an economy operates.”