

The book cover features a stylized illustration of a winding river in shades of green and yellow. The river flows from the top right towards the bottom left. The background is a gradient of green and yellow. There are several small, dark green trees and rocks scattered along the banks of the river. The title and author's name are written in white text over the illustration.

Climate Change, Radical Uncertainty and Hope

Theology and Economics
in Conversation

Jan Jorrit Hasselaar

Amsterdam
University
Press

Climate Change, Radical Uncertainty and Hope



Amsterdam
University
Press

Climate Change, Radical Uncertainty and Hope

Theology and Economics in Conversation

Jan Jorrit Hasselaar

Amsterdam University Press



Amsterdam
University
Press

Cover illustration: Lot Bakker

Cover design: Coördesign, Leiden

Lay-out: Crius Group, Hulshout

ISBN 978 90 4855 847 6

e-ISBN 978 90 4855 848 3

DOI 10.5117/9789048558476

NUR 700



Creative Commons License CC BY NC ND

(<http://creativecommons.org/licenses/by-nc-nd/4.0>)

©J.J. Hasselaar / Amsterdam University Press B.V., Amsterdam 2023

Some rights reserved. Without limiting the rights under copyright reserved above, any part of this book may be reproduced, stored in or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise).

Table of Contents

Preface	9
Bibliography	11
1. Introduction	13
1.1 The neglected notion of hope	13
1.2 Jonathan Sacks	14
1.3 Theology as the good life	14
1.4 Conversation with economics on radical uncertainty in climate change	16
1.5 A reader's guide: Outline of the study	20
1.6 Conclusion	23
Bibliography	23
2. Stating the Problem: Radical Uncertainty	27
2.1 Introduction	27
2.2 Economics	28
2.3 Economics on climate change	29
2.4 Stern/Nordhaus-controversy	32
2.5 Uncertainty	34
2.6 Radical uncertainty	36
2.7 Economics on radical uncertainty	37
2.8 Theology on radical uncertainty in climate change	41
2.9 Conclusion	43
Bibliography	44
3. Theology and Economics in Conversation	47
3.1 Introduction	47
3.2 Theology and economics	48
3.3 Van Huyssteen's postfoundational approach	50
3.4 Transversal reasoning	53
3.5 A shared problem: radical uncertainty in the context of climate change	55
3.6 Hope in climate change	56
3.7 Central question and structure of the research	59
3.8 Conclusion	60
Bibliography	61



4. Jonathan Sacks' Understanding of Hope	65
4.1 Introduction	65
4.2 A postfoundational approach to theology	67
4.3 Developing a middle ground: <i>Torah vehokmah</i>	69
4.4 The meaning of <i>Torah vehokmah</i>	70
4.5 Torah	72
4.6 Torah and the narrative	75
4.7 The Exodus	76
4.8 Key ingredients of Sacks' understanding of hope	78
4.8.1 <i>Emunah</i>	78
4.8.2 <i>Chessed</i>	80
4.8.3 A change of identity	82
4.9 God, a particular light in a universal world	85
4.10 Retelling the narrative of hope	86
4.11 Critical assumptions of hope	89
4.12 Conclusion	90
Bibliography	91
5. Transversal Reasoning on <i>Emunah</i>	93
5.1 Introduction	93
5.2 A postfoundational approach to economics	95
5.3 The economist Bart Nooteboom on trust	98
5.4 TR between Sacks and Nooteboom on <i>emunah</i>	100
5.4.1 On <i>emunah</i>	101
5.4.2 On climate change	103
5.5 Conclusion	105
Bibliography	105
6. Transversal Reasoning on <i>Chessed</i>	107
6.1 Introduction	107
6.2 The economist Bowles on social preference 1	108
6.3 TR between Sacks and Bowles on <i>cheded</i>	110
6.3.1 On <i>cheded</i>	110
6.3.2 On climate change	113
6.4 Nooteboom on relational contracting	115
6.5 TR between Sacks and Nooteboom on governance of <i>cheded</i>	116
6.5.1 On governance	116
6.5.2 On climate change	119



6.6 Conclusion	124
Bibliography	125
7. Transversal Reasoning on Change of Identity	127
7.1 Introduction	127
7.2 Bowles on social preference 2	128
7.3 TR between Sacks and Bowles on change of identity	130
7.3.1 On change of identity	131
7.3.2 On climate change	132
7.4 The economist Dan Ariely on Sabbath	134
7.5 TR between Sacks and Ariely on governance of change of identity	136
7.5.1 On governance	136
7.5.2 On climate change	138
7.6 Conclusion	143
Bibliography	143
8. Transversal Reasoning on Narrative	145
8.1 Introduction	145
8.2 The economists John Kay & Mervyn King on narrative	145
8.3 TR between Sacks and Kay & King on narrative	148
8.3.1 On narrative	148
8.3.2 On climate change	150
8.4 Conclusion	155
Bibliography	156
9. Conclusions	157
9.1 Introduction	157
9.2 Answering the sub-questions	159
9.2.1 Conversation between theology and economy	159
9.2.2 Sacks' understanding of hope	159
9.2.3 Applying TR	160
9.3 Main conclusions	161
9.3.1 Conclusions on <i>emunah</i>	161
9.3.2 Conclusions on <i>chessed</i>	161
9.3.3 Conclusions on change of identity	162
9.3.4 Conclusions on narrative	163
9.3.5 Conclusions on covenant and public Sabbath	164



9.4 What disciplines can learn from TR	166
9.4.1 Theology	166
9.4.2 Economics	167
9.5 Limitations and further research	168
Bibliography	169
Bibliography	171

Preface

In the last decade radical uncertainty has made itself felt in new and powerful ways. The financial crisis of 2007-09 blew away the illusion of certainty among decision-makers. The COVID-19 pandemic and the war in Ukraine have made us all aware that our world is deeply interconnected and vulnerable, and that the future is radically uncertain. The focus of this study is on radical uncertainty in the context of climate change.

In this publication I combine theology and economics, disciplines often considered as incompatible as cat and dog. This incompatibility has intuitively always dissatisfied me, because what both disciplines have at least in common is the same reality or the same 'oikos', to use the Greek word for household, that can also be found in the word 'eco-nomics'. Climate change should challenge us to come out of our comfort zone, because addressing such a multifaceted and global issue can never be the task of one discipline alone. In this study I go on a journey to discipline my intuition, investigating whether and how the two disciplines can strengthen each other in developing a social response to radical uncertainty in the context of climate change. My point of departure is theology.

Anthropogenic climate change, distinguished from climate change caused by natural factors, can be easily described as an economic problem, because it is the result of many economic exchanges between consumers and producers. However, Amartya Sen (Nobel Prize Winner in Economic Sciences 1998) has argued that non-economic factors like political, sociological and philosophical ones are often at the heart of economic problems:

Taking an interest in them [non-economic factors] is part of our own heritage. After all, the subject of modern economics was in a sense founded by Adam Smith, who had an enormously broad view of economics... An economic analyst ultimately has to juggle many balls, even if a little clumsily, rather than giving a superb display of virtuosity with one little ball. (Klamer, 1989, p. 141)

This study considers climate change not just as an economic problem, but as a shared problem in both theology and economics. I have therefore taken up the challenge to juggle the balls of theology and economics in order to contribute to a fuller and wiser understanding of our response to radical uncertainty in the context of climate change.



The title of this study is '*Climate Change, Radical Uncertainty and Hope: Theology and Economics in Conversation*'. Radical uncertainty in the context of climate change is often surrounded by a widespread atmosphere of fear and apocalypse, but I argue here that radical uncertainty does not carry with it its own interpretation. There is more than one way of interpreting radical uncertainty in climate change. In this research I investigate an interpretation of hope. In everyday language hope is often used glibly, for example in the remark: I hope that tomorrow the sun will shine. The focus here is on a neglected understanding of hope based on the work of Jonathan Sacks, leading British intellectual and former Chief Rabbi of the United Hebrew Congregations of the Commonwealth. Sacks' understanding of hope, derived from the ancient narrative of the Exodus, orients us to the possibility of gradually starting together something new and liberating in the midst of radical uncertainty. This research is in the field of theology. However, I will argue that the theological approach employed is not contrary to economics insights, but emerges out of economic debate, and is remarkably compatible with certain lines of economic thought. What is more, I show that theology and economics can learn from each other in the conversation developed in this research. Jonathan Sacks passed away during this study. May his memory be a blessing to us all.

In this research I do not use the Christian designation Old Testament, because this can be seen as implying that the Old is completed in the New. This would be a wrong and outdated implication. The real challenge is to consider both Testaments as old-new sources of inspiration in every time and context. Instead of using the term Old Testament I will refer to the Hebrew Bible. In quoting the biblical text I use the version commonly quoted in scholarship, namely the New Revised Standard Version (NRSV), except in the chapters dealing with the work of Jonathan Sacks. If required by the context, I use his translation

The chapters 1 and 3 through 8 of this study draw upon previous work of mine published in *The International Journal of Public Theology* (2020a), *Fullness of Life and Justice for All* (2020b), *Water in Times of Climate Change* (2021), *De moderne theologien* (2022a) and *The Calling of the Church in Times of Polarization* (2022b).

This interdisciplinary research has been a thoroughly enriching journey. It has been a project I could not have done on my own. I am very grateful for the people who have supported me directly and indirectly. Many people I would like to thank, but I cannot list them all here. There are some, however,



I don't want to pass over, since without their commitment, support and friendship I do not think this work could have been done. A special thanks to Professor Azza Karam, Professor Erik Borgman, Professor Arjo Klamer, Dr. Roel Jongeneel and Professor Toine van den Hoogen. It has been a joy and a privilege to work with you on this publication. With gratitude I thank the sisters of the Priorij Emmaus monastery in Maarssen for their hospitality, daily structure and prayers I experienced several times during this project. Unfortunately, your doors are closed now. I pray that the spirit in your monastery of seeking a balance between *vita activa* (active life) and *vita contemplativa* (contemplative life) may find other ways to serve our reality. I am grateful to Myra Scholz for editing this book. Any errors remain my own doing, of course. Lot, thank you for designing together the front page of this publication.

Finally, I'd like to thank my parents Jan Hasselaar and Hannie Hasselaar-Kelderman. Ma, you have shown how we can embrace radical uncertainty in times of corona. In the first lockdown (2020), when nursing homes were closed for visitors, you put your trust in love by bringing Pa home when his condition worsened and he entered his last phase on earth. At home, meaning and perspective were created in a situation that could have been very different in the nursing home. From one moment to the next, Pa and all of us were surrounded by love and attention. Heaven became a place on earth. Last, but surely not least, 'thanx' to my beautiful and beloved nieces and nephews for who you are, and the joy, play and pizzas that you bring.

Bibliography

- Hasselaar, J.J. (2020a). Hope in the Context of Climate Change: Jonathan Sacks' Interpretation of the Exodus and Radical Uncertainty. *International Journal of Public Theology* 14, pp. 224–240.
- Hasselaar, J.J. (2020b). Hope to Embrace Radical Uncertainty in Climate Change. In E. Van Stichel, T. Eggensperger, M. Kalsky, & U. Engel (eds.), *Fullness of Life and Justice for All* (pp. 51-68). Adelaide, Australia: ATF Theology. <https://dx.doi.org/10.2307/j.ctv16t6ms2.8>
- Hasselaar, J.J., & Ijmker, E.C. (eds.). (2021). *Water in Times of Climate Change: A Values-driven Dialogue*. Amsterdam, The Netherlands: Amsterdam University Press.
- Hasselaar, J.J. (2022a). Jonathan Sacks. In M. Poorthuis, & W. Veen (eds.), *De moderne theologen: Perspectieven op de 21ste eeuw* (pp. 290-297). Amsterdam, The Netherlands: Boom uitgevers.



- Hasselaar, J.J., Pattberg, P. & Smit, P.B. (2022b). Sowing Hope in a Polarized Agricultural Debate. In H. Zorgdrager & P. Vos (Eds.), *The Calling of the Church in Times of Polarization. Volume 46: Studies in Reformed Theology* (pp. 155-176). Leiden, The Netherlands: Brill.
- Klamer, A. (1989). A Conversation with Amartya Sen. *Journal of Economic Perspectives*, 3(1), 135-150. <http://dx.doi.org/10.1257/jep.3.1.135>

1. Introduction

Abstract

This chapter introduces hope, based on the work of Jonathan Sacks, as a possible alternative to pessimism and optimism in dealing with radical uncertainty in climate change. Sacks' understanding of hope can be seen as an account of the good life, a renewed way of doing theology. Understood in this way, hope highlights key assumptions for addressing radical uncertainty: (1) *emunah* (a type of trust), (2) *chesed* (a type of love, including the covenant), and (3) change of identity (including the Sabbath). The chapter brings in Wentzel van Huyssteen's postfoundational approach to explore the relevance of an interdisciplinary conversation between theology and economics for a social response to radical uncertainty in the context of climate change.

Keywords: hope, Jonathan Sacks, Miroslav Volf, social response to climate change, radical uncertainty, Wentzel van Huyssteen, postfoundational approach

1.1 The neglected notion of hope

'Should we respond with optimism to climate change, Tata', asks Irene. The Dutch newspaper *Trouw* recounts a conversation between the sociologist Zygmunt Bauman and his daughter, the architect Irena Bauman. Tata (Polish for father) answers his daughter by stating that it is wrong to divide the world into optimists and pessimists. He says that there is a third possibility: a hopeful response to climate change. (Van Rootselaar, 2014) This remark by Zygmunt Bauman merits closer attention. In the view of the cultural critic Terry Eagleton hope "... has been a curiously neglected notion in an age which, in Raymond Williams's words, confronts us with "the felt loss of a future"' (Eagleton, 2015, p. xi). Optimism and pessimism, in their 'pure' form, can be seen as views of history and human society. A pessimistic view can be described as considering change as evil because it is a deviation

Hasselaar, J.J., *Climate Change, Radical Uncertainty and Hope: Theology and Economics in Conversation*. Amsterdam: Amsterdam University Press, 2023

DOI 10.5117/9789048558476_CH01



Amsterdam
University
Press

from a certain good period in the past. In stark contrast, an optimistic view conceives of progress ultimately as good. (Schillebeeckx, 1983, pp. 97-98) But what is the meaning of hope, especially in the context of climate change, which is considered one of the most urgent questions that confronts us with a loss of a future. A reason why hope is a neglected notion might be that in today's language hope is likely to lapse into delusion and suggests (half-fearful) expectations like 'I hope that tomorrow the sun will shine' or 'I hope my train is on time'. This study takes a rather different approach regarding hope. It explores a profound and articulated understanding of hope in the context of climate change by using the work of Jonathan Sacks.

1.2 Jonathan Sacks

Jonathan Sacks (1948-2020) was a prominent author on hope in the first two decades of the twenty-first century. A British public intellectual and Chief Rabbi of the United Hebrew Congregations of the Commonwealth (1991-2013), Sacks held professorships at several academic institutions including Yeshiva University, King's College London and New York University. Standing in a long tradition, Sacks argues that hope is neither about (half-fearful) expectations, nor the same as optimism that rejects the complexity of reality. Hope, for Sacks, is a dimension in reality that was first discovered by patriarchs and matriarchs like Abraham, Sarah, Isaac, Rebekah, Leah, Rachel and Jacob. They discovered that they were not alone in this world and that this is good news. Hope does not reject the complexity of reality with its fear and despair, but does not surrender to either. (Sacks, 2009b, pp. 2-10) In Sacks' understanding of hope, hope is already there, but to claim its potential, people are invited to learn gradually that something new and liberating is possible (Sacks, 2011, pp. 206-207).

1.3 Theology as the good life

This research stands in a tradition of theology as a perspective of the good life. In their 2019 manifesto 'For the Life of the World', Volf and Croasmun plea for a renewal of (Christian) theology in Western societies along this line of the good life. In their view, academic theology is in a state of external and internal crisis. The external crisis is visible in a lack of employment opportunities for academic theologians. These theologians are also losing their traditional audience in Christian communities and are not able to



acquire a new one. And there is a loss of intellectual reputation of academic theology within the academy and beyond its walls. (Volf and Croasmun, 2019, pp. 36-45) This external crisis stems, at least in part, from an internal crisis. Volf and Croasmun consider the most important crisis of theology to be an internal one in which theology has forgotten its own purpose, namely to employ theology in order to discern, articulate and pursue accounts of a flourishing or good life. In their view, this internal crisis has led to two coping strategies: (1) embracing the research ideal of natural sciences and their methodologies, and (2) clutching nostalgically to past convictions and ways of life. Volf and Croasmun plea for theology as a perspective of the good life. They argue that theology defined as the good life is not an innovation. There is a broad legacy for articulating visions of the good life within theology. It is possible to read, explicitly or implicitly, all great theologians as different versions of an account of the good life. Volf and Croasmun name only a few theologians like Augustine, Maximus the Confessor, Thomas of Aquinas, Bonaventura, Luther, Calvin, C.S. Lewis, Jürgen Moltmann and Gustavo Gutiérrez. (Volf and Croasmun, 2019, p. 62 and p. 112) In one way or another, all of these theologians advocate a vision of the flourishing life rooted in modes of thinking or being oriented towards God.

In the Dutch 2020 theological book of the year, *Alle dingen nieuw*, Erik Borgman argues in the same direction with his plea for a theology in the 21st century based on two basic themes: (1) God's presence in our finite reality, and (2) that this presence is good news, because it fundamentally transforms our reality (Borgman, 2020, p. 319). Borgman also highlights here a perspective on reality of the good life, rooted in our orientation towards God. Let me be clear, other forms of theology are important too. By analogy with my understanding of economics as a collection of models to study reality (section 2.2), I view diverse forms of theology as models to study different aspects of reality. In this study I employ theology as a perspective of the good life, based on the work of Jonathan Sacks, to explore the question that lies ahead of us, namely how to deal with radical uncertainty in the context of climate change. I will come back to this question in section 1.4.

In this study I will argue that Sacks' understanding of hope, based on the awareness that we are not alone in this world and that this is good news, is also an account of the good life. Key assumptions of his account of the good life are: (1) *emunah*, a particular kind of trust (2) *chesed*, a particular kind of love with linkage to the covenant, and (3) change of identity with linkage to the Sabbath. Sacks' view of the good life is thematized in the particularity of Judaism which is nevertheless able to



engage the world around it, without any recourse to reductionism. The special contribution made by the thought of Jonathan Sacks is that it not only continues

... the venerable Jewish philosophical tradition of maintaining traditional faith in the face of external intellectual challenges, but also moves beyond this tradition by showing how core Jewish teachings can address the dilemmas of the secular world itself. What makes Lord Sacks's approach so effective is that he is able to do this without any expectation of the wider world taking on Judaism's theological beliefs... His work challenges religious thinkers to chart a new direction for religious thought that works towards a form of universalism in which they can simultaneously remain proud of their particularity. (Harris, Rynhold & Wright, 2012, pp. xvi/xvii)

In line with this quotation, in this study I will not only investigate Sacks' understanding of hope in relation to climate change. I will also bring it in conversation with the wider world, in particular the academic discipline of economics. At first sight, it may be seem surprising that I, a Christian theologian, turn to Sacks, who is neither a Christian nor a theologian in the strict sense of the word. However, I will argue that economics brings me to theological questions. And answering these questions leads me to the work of Jonathan Sacks. In section 2.8 I will give a clear argument for choosing Sacks. This argument will be further developed in section 3.6.

1.4 Conversation with economics on radical uncertainty in climate change

Climate change can be seen as one of the key and most urgent contemporary challenges. This becomes clear from the fact that on 25 September 2015 the General Assembly of the United Nations adopted climate change as Sustainable Development Goal (SDG) 13. This response to climate change (SDG 13) is part of the larger agenda Transforming Our World: The 2030 Agenda for Sustainable Development (United Nations, 2015). What is more, in December 2015, 195 countries adopted the Paris Agreement during the 21st session of the Conference of the Parties (COP21) of the United Nations Framework Convention on Climate Change (UNFCCC). One of the key achievements of the Paris Agreement was the goal of limiting global temperature increase to well below 2 degrees Celsius, while urging efforts to limit the increase to 1.5 degrees. In article 4 of the agreement, this goal is



further defined as reaching greenhouse gases (GHGs)¹ emissions neutrality in the second half of the century. (United Nations, 2016)

Nevertheless, during the period 2010-2019 CO₂ rose, although the rate of emissions growth slowed. In 2020, CO₂ emissions dropped temporarily due to responses to the COVID-19 pandemic. Since then, however, CO₂ emissions have exceeded pre-pandemic levels recorded in early 2019. (IPCC, 2022b, p. 2-19-21) Increasingly since the Fifth Assessment Report of Intergovernmental Panel on Climate Change (IPCC) in 2013-2014, widespread, pervasive impacts to ecosystems, people, settlements, and infrastructure have been attributed to human-induced climate change. It has caused, for example, widespread deterioration of ecosystem resilience, reduction in water and food security, especially in vulnerable regions, shifts in seasonal timing, local loss of species, hydrological changes and retreat of glaciers. (IPCC, 2022a, p. 9) Near-term actions that limit global warming to close to 1.5°C would substantially reduce projected losses and damages related to climate change in human systems and ecosystems, compared to higher warming levels. (IPCC, 2022a, p. 13)

In 2010 a special issue of the *International Journal of Public Theology* was dedicated to climate change and the common good. The contributions came from different theological and ecclesial traditions and addressed several levels of climate change. However, the contributions rarely interacted with a broader audience. (Pearson, 2010, p. 270) This was a missed opportunity, because—as Conradie argues—theology needs to collaborate with other sciences to address the challenges associated with climate change. Addressing such a multifaceted and global issue can never be done by one discipline alone. (Conradie & Koster, 2020, p. 13) What is more, there is even one SDG, number 17, entirely dedicated to stimulating cooperation in order to achieve the other SDGs, including a response to climate change.

In the view of David Tracy there are several ‘publics’ theology can engage with. He distinguishes three ‘publics’: academy, church (in my view better described in today’s interreligious world as ‘religious institutions’) and society. (Tracy, 1981, p. 5) Stackhouse considers Tracy’s distinction of three ‘publics’ insufficient at the present time. “With the rise of publicly held, high-tech, multi-national and trans-national corporations and of largely corporate-regulated, global market-system of exchange, the economy has

¹ GHGs are a diverse group that includes carbon dioxide (CO₂), nitrous oxide (N₂O), and halocarbons (a group of gases including CFC (chlorofluorocarbon)). In this study I will use CO₂ as shorthand for GHGs generally.

become an increasingly independent public realm...” (Stackhouse, 2007, p. 110). Stackhouse adds a fourth dimension to the three publics of Tracy, the economic public. The distinction between several publics or audiences is useful for reasons of focus, clarity and language. Although it is impossible to keep these publics distinct from one another.

This research focuses on a conversation between theology and economics. Economics is related to Tracy’s public of the academy and not directly to the economic public of Stackhouse. In short, economics refers to an academic discipline, while economy refers to the domain of economic actors and activities. As a consequence, this research does not include for example a topic like (reflection on) Islamic banking and finance.

In contrast to theological contributions, the significance of economics in developing a response to climate change is widely recognized (IPCC, 2014, p. 213). Nevertheless there is at least one topic economists struggle to address in their response to climate change. In the next chapter I will argue that this topic emerges out of a debate within economics on risk and uncertainty in the context of climate change. In line with an increasing number of economists like John Kay and Mervin King, I argue that mainstream economics runs into serious limitations when it comes to decision-making under conditions of radical uncertainty. This has not only become clear in climate change, but also in the financial crisis of 2007-09 and in the COVID-19 pandemic starting in 2020. All these are manifestations of an increasingly interconnected world in which radical uncertainty becomes more visible. I will argue that the limitations of economics in addressing radical uncertainty invite a conversation with theology about hope.

The economist John Maynard Keynes ranked hope among animal spirits like spontaneous optimism, nerves, hysteria, whim and sentiment (Keynes 2008, p. 105). During the last century, Keynes’ animal spirits were largely absent from economics. But times are changing. In the wake of the global financial crisis, George A. Akerlof (Nobel Prize Winner in Economic Sciences 2001) and Robert J. Shiller (Nobel Prize Winner in Economic Sciences 2013) stressed in their book *Animal Spirits* the necessity of a return of animal spirits in economics in order to arrive at a more realistic picture of the economy (Akerlof and Shiller, 2009, p. 168).

Here I take a rather different understanding of hope in order to address radical uncertainty in climate change. This study brings the work of Rabbi Jonathan Sacks on hope in conversation with economics. There are at least three reasons for doing so. First, radical uncertainty as uncertainty inherent in the human condition is of central concern in Sacks’ work. Second, standing in a long and nuanced tradition going back to Maimonides, Sacks



shows that hope, in Hebrew *Tikvah*, is neither a subjective whim, nor a wish list. In Sacks' understanding, hope is best expressed in a narrative about a learning process to embrace radical uncertainty. Third, Sacks' approach of *Torah vehokmah*, which means the relation between Torah and secular wisdom (including natural and social sciences), might be useful to stimulate a conversation between theology and the public of economics.

Nevertheless, a conversation between theology and economics has hardly been attempted in recent times. Therefore, I develop van Huyssteen's postfoundational approach to rationality, originally created to facilitate the interaction between theology and natural sciences, into a methodology that seems promising for enabling a conversation between theology and economics. A postfoundational approach to rationality, as I will show in chapter 3, assumes neither a universal form of rationality nor an extreme relativism of rationality. A postfoundational approach rather recognizes the embeddedness of all human reflection in human culture, including specific research and confessional traditions. It recognizes that everybody comes to interdisciplinary interactions with questions, assumptions and arguments shaped by a certain culture. As a consequence, participants can pose different questions, perceive various facts differently, and favour different explanations. Working together on a shared problem then does not lead to extreme relativism of each contribution. In working together participants might provide a fuller understanding of the problem and a better practical response. (van Huyssteen, 1999, pp. 7-9)

For van Huyssteen, a critical reflection of one's own embeddedness is a precondition for an interdisciplinary interaction. Therefore, in chapter 5 and 6 I assess whether the candidates selected for a postfoundational interaction in this study have critically reflected on their own embeddedness. Such an assessment raises questions about my own embeddedness, so let me be very clear about that. I was raised in an Orthodox Protestant middle-class family in Veenendaal, a mainly white and Christian village in the Netherlands, North-Western Europe. I am the second of four children. My father worked as an insurance agent. My mother was a nurse, before she stayed at home to take care of the children. I was raised in a safe and secure context, which has contributed to a sense of self-confidence. In my youth I spent long periods of time in hospital due to an illness which had a significant impact on me. My elder brother and I were the first ones in the family who went to university. I studied (social and institutional) economics and theology at the University of Utrecht. As part of my Masters in development economics I did research in the batik industry in Java (Indonesia) and spent a month with indigenous people in the Eastern



part of the country, both enriching experiences. To complete my study in theology, I went to Geneva, the ecumenical institute of Bossey. Bossey is an international centre that brings together students from diverse churches, cultures and backgrounds for ecumenical learning, academic study and personal exchange. My PhD was earned at the Vrije Universiteit Amsterdam. Given this background, in the present study I will refer mostly to theological sources from (Western) Christianity and (Western) Judaism instead of sources from other religions (e.g. Islam or Buddhism). When it comes to economics, I will position myself in a debate that is taking place predominantly at Western universities. I will also limit my sources to English and Dutch literature. As stated above, a postfoundational approach to rationality states that each participant of an interdisciplinary study brings something to the table, informed by her or his history, experience and background. Here I have shown some of my background. That is part of what I will bring to the table in this study.

A final remark regarding van Huyssteen's postfoundational approach, to avoid misunderstanding: this approach, and therefore this study, seeks a conversation between practitioners of different disciplines in order to create a fuller understanding of, and formulate better (practical) responses to radical uncertainty in the context of climate change. What is required now is a conversation and not a fusion. As a consequence, this approach does not aim for a new economic model, but to stimulate a conversation between theology and economics on a shared problem.

1.5 A reader's guide: Outline of the study

Above I have argued that a proper response to climate change demands collaboration between theology and other sciences. Conradie, however, rightly notes that this is easier said than done (Conradie & Koster, 2020, p. 14). It appears to be challenging to work across different fields of study. What is more, a conversation between theology and economics has rarely been undertaken in recent times. This research is an exploratory study in the field of theology. At the same time, it brings together experts who normally do not meet, let alone interact. Therefore, in this study we are going on a challenging journey to bridge the disciplines of theology and economics on the shared problem of radical uncertainty in the context of climate change.

In order to stimulate a constructive journey, let me be very clear about my argument in this research. After this first chapter, the study is structured

as follows. Chapter 2 states the problem of this research. It subsequently defines economics, using the work of Dan Rodrik. Then I give a review of economic research on climate change in order to state the problem of this study in detail. The problem statement emerges out of long-standing controversies between economists about the question of how to guide collective decision-making in the context of climate change. In this chapter the controversies are illustrated by one notable controversy, namely between the prominent economists William Nordhaus and Nicolas Stern based on the social cost-benefit analysis. I maintain that radical uncertainty attached to the future is considered a risk, and as a result is actually ignored, which leads to strong disagreement among economists. This chapter makes a clear distinction between risk and uncertainty, relying on the arguments of several economists, and puts decision-making under conditions of radical uncertainty at centre stage. It is here, I argue that a way opens for an interaction between theology and economics.

The aim of chapter 3 is to develop a methodology that allows an interaction between theology and economics. A short review shows that there has hardly been any equal conversation between theology and economics in recent times. Therefore, the chapter explores van Huyssteen's postfoundational approach as a methodology that seems promising for enabling a conversation between theology and economics. The key to a postfoundational interdisciplinary interaction is expressed in the notion of transversal reasoning (TR). TR facilitates a performative, dynamic and multi-levelled conversation between theology and science. It is stated that this postfoundational approach refers especially to the interaction between theology and natural sciences. Nevertheless, the point made here is that this approach is appropriate for any interdisciplinary conversation as long as the three guidelines for TR are mutually honoured: (1) there is a focus on specific theologians and scientists instead of the rather a-contextual terms 'theology and science'; (2) these theologians and scientists engage in specific kinds of theologies and sciences with postfoundational characteristics; (3) the interaction has to be on a clearly defined and shared problem. The chapter continues then with the last of these and defines radical uncertainty in climate change in depth, using work of Hannah Arendt. Drawing on insights obtained from studying 'theologian' Jonathan Sacks, I propose to use his work, especially his understanding of hope, in order to study radical uncertainty in the context of climate change, and to do so in interaction with economics. The chapter then proposes TR between Jonathan Sacks and the economists Bart Nooteboom, Samuel Bowles,

Dan Ariely² and John Kay & Mervyn King. This results in the following research question:

What is the relevance of a conversation between the theologian Jonathan Sacks and the economists Bart Nooteboom, Samuel Bowles, Dan Ariely and John Kay & Mervyn King for a social response to radical uncertainty in the context of climate change?

The aim of chapter 4 is to answer the twofold question: What is the meaning and possible societal impact of Jonathan Sacks' understanding of hope? In order to achieve this aim, I develop a systematic overview of Sacks' approach of *Torah vehokmah*. Sacks' *Torah vehokmah* refers to an ongoing conversation between Torah (theology and philosophy) and *hokmah* (secular wisdom, including natural and social sciences). Here particular attention is given to Sacks' interpretation of the narrative of the Exodus, because Sacks' understanding of hope is derived from this narrative. In elucidating the concept of hope, Sacks provides a particular account of how the good life addresses radical uncertainty. This account is based on the assumptions of *emunah* (a form of trust), *chessed* (a form of love, including the institution of the covenant) and change of identity (including the institution of a public Sabbath). The chapter highlights examples of earlier societal impacts of this account of the good life and contemporary debates in climate change that directly or indirectly argue for such an account in climate change.

The aim of the chapters 5 through 8 is to develop a pilot study of TR. The focus is on a reasoning between Jonathan Sacks and the economists Bart Nooteboom, Samuel Bowles, Dan Ariely and John Kay & Mervyn King. These economists are selected for two reasons. First, I will argue that their work can be construed as a postfoundational approach to economics. Second, concepts in their work relate to the critical assumptions underlying Sacks' understanding of hope. The point of departure in this TR is Sacks' understanding of hope and its narrative mode as presented in chapter 4 with the following critical assumptions: *emunah*, *chessed* (including the institution of the covenant) and change of identity (including the institution of a public Sabbath). In chapter 5 TR between Sacks and Nooteboom is on *emunah*. In

2 In a post of the research blog Data Colada (17 August 2021) concerns were raised of possible fraud in a 2012 paper of Dan Ariely that he co-wrote. Ariely acknowledges that he undoubtedly made a mistake, but insists his actions were innocent. At this moment of writing (19 November 2022) the paper has been retracted, but Ariely has not been condemned. Therefore, it is still justified to use his work. For the research blog of Data Colada see: <http://datacolada.org/98>.

chapter 6 it is between Sacks and Bowles on *chessed* and between Sacks and Nootboom on the governance of *chessed*. In chapter 7 TR between Sacks and Bowles is on change of identity, and between Sacks and Ariely on the governance of change of identity. The last TR, in chapter 8, is between Sacks and John Kay & Mervyn King on the narrative. Each turn of TR consists of two parts. The first part deals with the question whether the critical assumptions or the narrative mode of Sacks' understanding of hope and the concept of the economist concerned can interact. If so, to what extent can similarities and differences be found? Do the concepts supplement, deepen or exclude one another? The second part of TR concerns the relevance of the conversation in part 1 for a social response to radical uncertainty in the context of climate change.

The last chapter answers the central question by giving a summary of the main conclusions and provides an evaluation.

1.6 Conclusion

In this introductory chapter hope emerged as an alternative to pessimism and optimism in climate change. It stated that this study explores an understanding of hope in the context of climate change by using the work of Jonathan Sacks. Sacks' understanding of hope fits in a tradition of theology as a perspective of the good life. Key assumptions of this account of the good life are: (1) *emunah*, (2) *chessed*, including the covenant, and (3) change of identity, including the Sabbath. Following David Tracy, there are several public theology can engage with. This study limits itself to the academic public and focuses on a conversation between theology and economics. The reason for this is that conventional economics runs into serious limitations in addressing radical uncertainty regarding climate change. A conversation between theology and economics has hardly been attempted in recent times. The study uses van Huyssteen's postfoundational approach to develop a conversation. Finally, in order to stimulate a fruitful interaction between theology and economics, a reader's guide is given.

Bibliography

Akerlof, G.A., & Shiller, R.J. (2009). *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism*. Princeton, NJ: Princeton University Press.



Amsterdam
University
Press

- Borgman, E. (2020). *Alle dingen nieuw: Een theologische visie voor de 21ste eeuw: Inleiding en Invocatio*. Utrecht, The Netherlands: KokBoekencentrum Uitgevers.
- Conradie, E.M., & Koster, H.P. (Eds.). (2020). *T&T Clark Handbook of Christian Theology and Climate Change*. London, United Kingdom: T&T Clark.
- Eagleton, T. (2015). *Hope without Optimism*. Charlottesville: University of Virginia Press.
- Harris, M.J., Rynhold, D., & Wright, T. (Eds.). (2013). *Radical Responsibility: Celebrating the Thought of Chief Rabbi Lord Jonathan Sacks*. New Milford, CT: Maggid Books.
- IPCC. (2014). *Climate change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, United Kingdom and New York, NY: Cambridge University Press.
- IPCC. (2022a). *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. United Kingdom and New York, NY: Cambridge University Press.
- IPCC. (2022b). *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. United Kingdom and New York, NY: Cambridge University Press.³
- Keynes, J.M. (2008). *The General Theory of Employment, Interest and Money* (later edition). Middletown, RI: BN Publishing.
- Pearson, C. (2010). Editorial: Special Issue—Climate Change and the Common Good. *International Journal of Public Theology*, 4. Leiden, The Netherlands: Brill, 269-270. Retrieved from <http://www.brill.com/international-journal-public-theology>
- Rootselaar, F. van. (2014, 15 February). De mens kan niet wereldwijd denken. *Trouw*. Retrieved from <https://www.trouw.nl/nieuws/de-mens-kan-niet-wereldwijd-denken~b1d47b61/>
- Sacks, J. (2009b). *Future Tense: Jews, Judaism, and Israel in the Twenty-First Century*. New York, NY: Schocken Books.
- Sacks, J. (2011). *The Dignity of Difference: How to Avoid the Clash of Civilizations* (Rev. ed.). London, United Kingdom: Continuum.
- Schillebeeckx, E. (1983). *God among Us: The Gospel Proclaimed*. New York, NY: Crossroad.
- Stackhouse, M. L. (2007). *Globalization and Grace: Volume 4: Globalization and Grace (Theology for the 21st Century)*. New York, NY: Continuum.

3 These three IPCC-references differ in style from that proposed by the IPCC. This is due to the APA citation style guidelines used here.

- Tracy, D. (1981). *The Analogical Imagination: Christian Theology and the Culture of Pluralism*. New York, NY: Crossroads.
- United Nations, General Assembly. (2015, 25 September). *Transforming Our World: The 2030 Agenda for Sustainable Development*. Retrieved from <https://sdgs.un.org/2030agenda>
- United Nations, Framework Convention on Climate Change. (2016, 29 January). *Report of the Conference of the Parties on Its Twenty-First Session, held in Paris from 30 November to 13 December 2015*. Retrieved from <https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf>
- van Huyssteen, J.W. (1999). *The Shaping of Rationality: Toward Interdisciplinarity in Theology and Science*. Grand Rapids, MI: Wm. B. Eerdmans Publishing.
- Volf, M. & Croasmun, M. (2019). *For the Life of the World: Theology That Makes a Difference*. Grand Rapids, MI: Brazos Press.

