

9. Conclusions

Abstract

This chapter concludes the study with a summary of the main conclusions of transversal reasoning (TR) between Jonathan Sacks and the economists Bart Nooteboom, Samuel Bowles, Dan Ariely and John Kay & Mervyn King. The relevance of TR is that it presents and deepens alternative critical assumptions for the ones underlying conventional economic modelling, in particular the social cost-benefit analysis (SCBA), in order to develop more properly a social response to radical uncertainty in the context of climate change. The study shows that Wentzel van Huyssteen's postfoundational approach allows a rather successful conversation between theology and economics. To conclude the postfoundational approach, the chapter answers the question of what both disciplines can learn from TR employed here. Finally, limitations and recommendations for further research are presented.

Keywords: Transversal reasoning, Jonathan Sacks, Bart Nooteboom, Samuel Bowles, Dan Ariely, John Kay, Mervyn King, Wentzel van Huyssteen, radical uncertainty

9.1 Introduction

This study explores the meaning of the neglected notion of hope for a social response to radical uncertainty in the context of climate change. The *impetus* for this exploration came from a suggestion made by Zygmunt Bauman. His remark has brought me into uncharted territory, namely a conversation between theology and economics, which has hardly been undertaken in recent times.

But the necessity for this conversation emerged out of the debate within economics on radical uncertainty in the context of climate change. Radical uncertainty, uncertainty inherent in the human condition (derived from Hannah Arendt), is not adequately addressed by the critical assumptions underlying conventional economic modelling, in particular the social

cost-benefit analysis (SCBA), including its Ramsey rule, used to develop a social response to climate change. The Stern/Nordhaus-controversy provides an illustration of controversies about parameters and judgement in SCBA that have been central to responses to climate change for many years. Following Rodrik's approach to economics, I point out that an economic model is only useful when it captures the most relevant aspects of reality. Therefore, it is not just perfectly legitimate, but also necessary in this study, to question the critical assumptions underlying SCBA: (1) objective knowledge, (2) the interests of one dynasty expressed in terms of a 'representative individual' and (3) fixed preferences. Alternative critical assumptions are required in order to address more properly radical uncertainty related to climate change. I have argued that Sacks' understanding of hope, derived from the ancient narrative of the Exodus, lends itself to several alternative critical assumptions for addressing radical uncertainty: *emunah* (a particular type of trust), *chesed* (a particular type of love), change of identity and two supporting institutions, namely covenant and public Sabbath. Sacks' understanding of hope demands not simply copying truths of generations before us. Hope needs to be born in every time and generation again by interpreting and living sensitively and creatively the critical assumptions underlying hope in the given context, here radical uncertainty in the context of climate change.

Economics brought me to theological questions and the concept of hope in the work of Jonathan Sacks—and to a renewed way of doing theology as an account of the good life. In order to complete the circle, and allow a fuller understanding of a social response to radical uncertainty in the context of climate change, I bring Sacks' understanding of hope into conversation with five economists: Bart Nooteboom, Samuel Bowles, Dan Ariely and John Kay & Mervyn King. This can be seen as a pilot conversation between theology and economics, a kind of intellectual pop-up salon. It led to 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 research question is broken down into three sub-questions. The sub-questions will be answered in next section. The central question is answered by summarizing the main conclusions in section 9.3. Section 9.4 shows what the disciplines involved can learn from the applied TR. Limitations and directions for further research can be found in section 9.5.

9.2 Answering the sub-questions

This section answers the three sub-questions.

9.2.1 Conversation between theology and economy

The first sub-question is about the possibility to construct a conversation between theology and economics.

In chapter 3 I constructed a framework, using van Huyssteen's postfoundational approach to rationality, to make a conversation between theology and economics possible. This postfoundational approach has four key characteristics: (1) recognizing the embeddedness of rationality in human culture, (2) interpreting a shared reality as common ground in all forms of inquiry, (3) critically investigating one's own embeddedness by the participant of an interdisciplinary interaction, (4) considering problem solving the most central and defining activity of all research traditions. The key to a postfoundational interdisciplinary interaction is expressed in the notion of transversal reasoning (TR), which is a conversation between different disciplines on a shared problem. The postfoundational approach was originally created for an interaction between theology and natural science. In this study I have shown that van Huyssteen's approach allows a conversation between theology and economics. A more general reason for this is that a postfoundational notion of rationality is not limited to the debate of religion (including theology) and natural sciences. Van Huyssteen's approach is a description of human rationality as itself constantly under construction in engaging with reality. A more particular reason is that I have honoured the three guidelines for a possibly successful postfoundational conversation, namely (1) a focus on specific theologians and economists instead of the rather a-contextual terms 'theology and economics'; (2) these theologians and economists engage in specific kinds of theology and economics with postfoundational characteristics; and (3) the interaction is on a clearly defined and shared problem.

9.2.2 Sacks' understanding of hope

The second sub-question is about the meaning and possible societal impact of Jonathan Sacks' understanding of hope.

In chapter 4 I created a systematic overview of Sacks' approach of *Torah* and *hokmah*, based on an extensive study of the literature, in order to

answer this question. *Torah vehokmah* refers to an ongoing conversation between two complementary domains of knowing, Torah (theology or philosophy) and secular wisdom (natural and social sciences). Sacks' understanding of hope is primarily rooted in Torah, especially in the narrative of the Exodus. As indicated, it lends itself to several critical assumptions for a social response to radical uncertainty: *emunah*, *chessed*, change of identity and the related institutions of covenant and public Sabbath.

The Exodus as a narrative of hope provides a particular perspective on reality, accessible to all. Therefore the Exodus has not only been the subject of an ongoing conversation within Judaism. It has also inspired Christians. And the story of the Exodus does not end in Christianity. The story has been told and retold over and over again in societies, for example by African-Americans in their struggle for civil rights. Recently, several scientists have proposed, directly and indirectly, a retelling of the Exodus in the context of climate change.

9.2.3 Applying TR

The third sub-question is: How can a conversation between Jonathan Sacks and the economists Bart Nooteboom, Samuel Bowles, Dan Ariely and John Kay & Mervin King be constructed in such a way that it can lead to the creation of a fuller understanding of a social response to radical uncertainty in the context of climate change?

In chapters 5 through 8 I constructed a conversation in turns between the critical assumptions and narrative mode of Sacks' understanding of hope and a related concept in the work of Nooteboom, Bowles, Ariely or Kay & King. Each turn of TR consists of two parts. The first part deals with the question whether the critical assumption or narrative mode and the concept of the economist concerned interact. And if so, to what extent are there similarities and differences. Do Sacks' assumptions or mode and the economist supplement or deepen one another? Can we find obvious areas of disagreement and do we find specific issues that need to be discussed further? The second part of TR deals with the relevance of the conversation in part 1 for a social response to radical uncertainty in the context of climate change.

To summarize, in this section I have answered the sub-questions. In next section I will answer the research question of this study.

9.3 Main conclusions

In this section the central research question is answered by summarizing the main conclusions of the second part of TR in chapters 5 through 8. First I will draw conclusions related to TR based on (1) *emunah*, (2) *chessed*, (3) change of identity, and (4) narrative. Thereafter I will bundle conclusions on covenant and public Sabbath to make the practical implications of this study more visible.

9.3.1 Conclusions on *emunah*

The relevance of the conversation between Sacks and Nootboom on *emunah* is that it familiarizes us with a form of knowledge that can be described as relational knowledge. It is a third form of knowledge, besides objective and subjective knowledge. Relational knowledge allows us to embrace radical uncertainty in the context of climate change. In discourses on climate change, elements of this kind of knowledge can already be found in Van der Sluijs' plea for post-normal science. The driving force of *emunah* is *chessed*.

9.3.2 Conclusions on *chessed*

The relevance of the conversation between Sacks and Bowles on *chessed* is that it highlights the importance of *chessed* and social preference 1, besides self-interest, when it comes to a social response to radical uncertainty in the context of climate change. People inspired by *chessed* seek to build new relationships in which the other and oneself are considered subject rather than only object. In the midst of radical uncertainty, new relationships are built, especially with those who are yet excluded, for example the climate, people in areas affected by climate change, climate-refugees, young people and yellow vests. Important to note here is that the excluded 'other' should not be seen in abstract terms, but should be known by name and seen as having a value in him- or herself.

Chessed orients us especially to creating relations between people with different or even conflicting identities, for example a director of an environmental NGO and the CEO of an oil company. Identity refers to the images people live by—images of themselves, others and the world. *Chessed* stimulates opposition in order to transform the identities people live by. Diversity is seen as a source of renewal and creativity instead of a source of polarization and paralysis as it often seems to be today.

Chessed also contains the possibility to explore nonhuman reality as a subject rather than only object. Some identities may have been useful in the past, for example ‘water as enemy’, but that does not mean that they are still useful when it comes to a social response to radical uncertainty in the context climate change. An example of a new relationship with nature can be expressed in concepts like ‘working together with water’. Although one can argue that such a concept still retains an instrumental approach to nonhumans. The idea of extending *chessed* to nonhuman beings might be better expressed in studies in a new field defined by Frans de Waal as evolutionary cognition, which tries to treat every species on its own terms. TR shows that taking responsibility in the context of climate change is not necessarily a painful matter of self-sacrifice, nor feeling guilty about your ecological footprint. The consequence of building relations of *chessed* with one another is in essence joy. The bottom-up approach of *chessed* coincides with recent climate analyses that concentrate on deliberative democracy, the role of non-state actors like citizens, cities and business.

It is especially Bowles who orients us to the (potential) role of negative other-regarding motivations, like parochial altruism, hate and envy, in the midst of radical uncertainty in climate change. This raises the question of how to govern relations of *chessed* in the midst of radical uncertainty. I come back to this in section 9.3.5.

9.3.3 Conclusions on change of identity

The relevance of the conversation between Sacks and Bowles on change of identity is that it highlights the need for time, expressed in a journey of two stages, when it comes to a transformative response to radical uncertainty in the context of climate change. The first stage of the journey is based on who we are, the identity underlying the actions that caused climate change. The focus of a response is here directly on the shared problem of climate change, for example reducing CO₂¹. The second stage of the journey orients us to a new and liberating identity, a new ‘we’. It is about who humans and nonhumans want to be with one another. Hope does not accentuate the outcome of such a transformative response to climate change, but the process towards the outcome. The reason for this is that, due to radical uncertainty, the outcome cannot be known in advance. What TR does emphasize is the

1 In this study CO₂ is used as shorthand for greenhouse gases (GHGs) that include carbon dioxide (CO₂), nitrous oxide (N₂O), and halocarbons (a group of gases including chlorofluorocarbon (CFC)).

crucial need for time in this transformative response. A transformation is only durable when the people involved change their identities by their own choice. This takes time. TR pays special attention to the education of young people in building new relationships with oneself and the other, including nature.

In TR Bowles introduces the notion of crowding out: monetary incentives can crowd out other-regarding motivation, which shows that an essential ingredient for a social response can be discouraged. Bowles advocates an approach that can stimulate wise combinations of self-interest and other-regarding motivation in order to develop prudent policies. However, according to Bowles there is not yet an institution that stimulates crowding-in effects when it comes to climate policy. Bowles gives us a glimpse of the tradition of ancient Greece in order to find such an institution, namely the Athenian assembly of two millennia ago. Sacks' understanding of hope highlights a public Sabbath as key institution for a transformative response to radical uncertainty in the context of climate change. I return to this in section 9.3.5.

9.3.4 Conclusions on narrative

TR between Sacks and Kay & King orients us to the possibility of narrative reasoning. A transformative response to radical uncertainty in climate change is best expressed in a narrative of hope. To take this insight seriously, an attempt has been made to construct a narrative of hope, expressed in a fictive lecture to be held at a climate summit.

Let me pause this summing up of conclusions. The conclusions above are not a naive invitation to a better world. TR explicitly shows that a transformative response to climate change is not a pill or an injection, a quick fix that can easily be realised. TR sees the shaping of fundamental and lasting transformations in identity as a journey that takes time. While on the way, we will encounter many conflicting interests, dead ends, false turns and acts of parochial altruism, self-interest and opportunism. The question is therefore whether there is something that can guide us during a transformative response to radical uncertainty in the context of climate change. Is there something that fosters hope and *chessed*? Is there something that supports us to enter a journey, the meaning and outcome of which we may barely glimpse. TR gives a surprising answer to that question and refers to the institutions of covenant and especially public Sabbath to protect and stimulate relations of *chessed*.

9.3.5 Conclusions on covenant and public Sabbath

Probably the most important part of TR is that it orients us to institutions that cultivate relations of *chessed* and add up to a very practical way to embrace radical uncertainty in the context of climate change. In this section I first draw conclusions on the covenant, then I will focus on the public Sabbath.

The relevance of the conversation between Sacks and Nooteboom on the level of governance of *chessed* is that it highlights an institution, the covenant. The covenant formalizes relations that seek to honour oneself and the other as subject when it comes to radical uncertainty in the context of climate change. In discourses on climate change, Bierman stresses the need for more imagination in the governance of the earth system, including climate change. One way to bring about such an improved architecture of governance is to reform or strengthen (top-down) intergovernmental decision-making, as Bierman proposes. Another way, highlighted in TR, is to strengthen a bottom-up approach as comes to expression in a covenant. A covenant is a (bottom-up) agreement between two or more people, better said subjects, who voluntarily and each on their own terms exchange promises to take responsibility for a shared future. A covenant does not mean that everybody agrees with one another. In a covenant people can in fact sharply disagree with one another, for example a director of an environmental NGO and the CEO of an oil company. What is more, the covenant seems to have the potential to include nonhumans as well, although it is still hard to imagine what this will look like. TR accentuates that not only collaboration is important in a covenant, but that competition and hierarchy based on the principles of the covenant are as well, in order to ensure that the many interests run parallel in the midst of radical uncertainty. In TR a real-life example of a covenant of hope is given.

The relevance of the conversation between Sacks and Ariely on the level of governance of change of identity is that it highlights the public Sabbath. The public Sabbath is a key public institution with the potential to coordinate a social response to radical uncertainty in the context of climate change for all involved, not just religious people. A transformative response to climate change is hard to complete. Therefore, it is crucial to have a coordination mechanism, a public Sabbath. In order to accentuate the public and inclusive role of the Sabbath, it is here renamed 'workplace of hope'. It may feel counterintuitive to describe the Sabbath as a workplace, because it literally means 'to stop' daily life. However, Sabbath is not simply a pause

that refreshes. It is the pause that transforms the identity people live by—the images they have of themselves, the other and nature. Such a workplace consists of four dimensions. First, the workplace is a regular moment that celebrates the new ‘we’ that people are aiming at, in the present. Second, a workplace of hope is a neutral space in the public domain, which values differences among the participants involved. Third, the workplace practices and, by doing so, protects and strengthens, relations of *chessed* that seek to create space for all involved. Fourth, the workplace stimulates the development of meaningful relations between people not only via reflection and practical steps forward, but also via music, poetry, eating together and art. These dimensions of the workplace of hope can deepen existing meetings and summits in order to make them rituals to embrace radical uncertainty in the context of climate change. TR presents the InspirationTable as a possible real-life sketch of a workplace of hope.

A summary of the main conclusions provides an answer to the research question. In this study I have argued that the critical assumptions underlying the economic model of SCBA run into serious limitations when it comes to radical uncertainty in the context of climate change. What insights does this study, based on critical assumptions underlying hope, present in relation to SCBA?

First, the study presents an additional form of knowledge, relational knowledge. In SCBA economists like Stern and Nordhaus, ‘professional experts’, try to optimize objectively a social response to climate change up to about 200 years ahead, supported by techniques to substitute for a lack of objective knowledge. Relational knowledge highlights a transformative response by all involved, including ‘day-by-day experts’, in which they gradually learn together, in a cyclical interaction of celebration, reflection and practice, how to internalize the externality of climate change.

Second, the study orients us to a different way to cover the interests of the members of one dynasty. In order to keep the analysis simple, SCBA assumes these interests in terms of a ‘representative individual’. However, TR makes it clear that such a simplification omits a crucial aspect of what makes us human, especially when it comes to radical uncertainty in climate change. TR highlights the crucial role of plurality among participants. It does not view plurality as a problematic source of conflict, but as a crucial source to open up the identity of those involved in order to create a new ‘we’. In addition, in SCBA a social response is distinguished from private decision making. This study shows a necessary interaction between the individual and societal level.

Third, SCBA assumes that people's preferences are given. This study makes it clear that, due to radical uncertainty, people can only gradually learn what they prefer.

Fourth, the study extends the notion of the social planner, often seen as a top-down (global) government, to include governance from bottom up, in particular a covenant and workplace of hope. TR stresses that a bottom-up approach is not opposed to the other forms of governance, but can be supported by and help to flesh out approaches of government and market.

Finally, TR extends the kind of questions commonly raised by SCBA in climate policy: How much reduction of CO₂ emissions is required? How fast should a reduction take place? How should the reductions be distributed? What may be the costs of a reduction? (section 2.3). TR adds underlying questions of meaning: Who are we as individuals and collective? In what or whom do we put our trust? What is it that we hope for? Who do we want to become in relation to ourselves and one another?

By providing the conclusions and insights presented in this section 9.3, TR between Sacks and Nootboom, Bowles, Ariely and Kay & King has shown that working together provides a fuller understanding of the shared problem and a better practical response. Therefore TR in this study has rather successfully explored alternative critical assumptions to address radical uncertainty in relation to climate change. TR provides necessary insights to enable politicians, public servants, business people, religious leaders and in particular ordinary people to act under conditions of radical uncertainty in the context of climate change.

9.4 What disciplines can learn from TR

After sharing the resources of interdisciplinarity in TR, a postfoundational approach points back to the boundaries of one's own discipline (section 3.4). What can both disciplines learn from TR employed in this study?

9.4.1 Theology

What can theology as a discipline learn from TR? Here I present three points that emerge from the present study.

First, I have shown that van Huyssteen's postfoundational approach can be used in order to develop an equal interaction between theology and economics. In TR it became visible that there is a deep historical conflict in

the legacy of the research traditions of theology and economics. However, it has also shown that there is no need for that conflict to be their destiny. Working together on shared problems creates the opportunity to renew the relationship between theology and economics.

Second, in his work Sacks seeks God in people who in themselves seem to point to something or someone beyond themselves. In *TR chessed* challenges the imagination to seek God not only in people and relations between them, but also in the ways nonhuman beings relate to each other, and to human beings. A perspective of hope based on *chessed* sees the whole of reality—human beings, animals, trees, climate—as a relational system. All are dependent on one another.

Third, the study challenges theology to explore a variety of forms of governance available within religious tradition(s) in order to support individuals and society at large in dealing with the human condition, with all its imperfection, dishonesty, radical uncertainty and crowding out-effects.

9.4.2 Economics

What can economics as a discipline learn from the interaction with theology?

First, that there is an interaction possible between economics and theology. In recent decades economics has been enriched by cross-overs with psychology (behavioural economics) and with sociology (identity economics). TR has shown that the applied interaction between economics and theology is neither artificial nor ideologically constructed. It emerged out of the debate within economics on uncertainty in the context of climate change. In that sense, economics has brought me to theological questions.

Second, Sacks' understanding of hope can supplement the critical assumptions and insitutions of conventional economics, at least when it comes to radical uncertainty. At the same time, TR shows that that elements of Sacks' understanding of hope are already present within economics, as indicated in the pilot conversation with Bart Nooteboom, Samuel Bowles, Dan Ariely and John Kay & Mervin King.

Third, economics can learn from TR that a mix of the general forms of governance—hierarchy, competition and relational contracting—is needed to deal with radical uncertainty. Several economists are not only rediscovering the theme of radical uncertainty, but are doing so from either a more or less Keynesian or Hayekian perspective, respectively government (hierarchy) or market (competition). TR orients us to a mix of governance to deal with uncertainty.

9.5 Limitations and further research

Limitations. The interaction between theology and economics presented here has at least three limitations.

First, the entry point of the present study is theology. In the study I have brought theology in conversation with economics. One may argue that less thorough attention is paid to (radical uncertainty regarding) climate change in other sciences. The main reason for this limitation is that I have a background in theology and economics, but not in other sciences. Therefore I have limited myself in particular to theology and economics.

Second, the reason to opt for Sacks is because of his treatment of radical uncertainty with a concept of hope and his postfoundational approach to theology. As a consequence, I do not relate Sacks extensively to his background (orthodox) Judaism.

Third, I was raised and educated in a Western, Christian and academic context. This embeddedness has influenced, and therefore also limited, the choices I have made and the insights I have gained in this study.

Further research. On a theoretical level, Sacks' understanding of hope is open to further interaction. It can be extended with other assumptions present in the Exodus, for example *mishpat*, justice done by the law, and *tzedakah*, which refers to social justice (Sacks, 2000, p. 125; 2005, pp. 32-33). In this research I touched upon the relationship between Jonathan Sacks and Christianity. However, an explicit elaboration on this relationship was beyond the scope of this study. Further research can investigate how Sacks' understanding of hope relates to the work of thinkers and theologians like Fromm, Bloch, Gutiérrez, Moltmann, Northcott and Deane-Drummond. A study can also explore how Sacks' understanding of hope relates to seemingly similar approaches in other cultures, like the process of *indaba*, rooted in Zulu culture, and highlighted by Archbishop Makgoba as a promising concept to overcome polarization in church and society on contemporary issues (Nesbitt, 2017). Further research can also extend TR with other economists such as Akerlof and Kranton with their *Identity Economics* (2010), Daniel Kahneman with his *Thinking, Fast and Slow* (2011), and Raghuram Rajan with his *The Third Pillar* (2019). The question can also be raised as to what kind of leadership is required in the several stages of a transformative response to climate change. Such a question can be explored by analysing the role of leadership in the Exodus, but also by considering the book *The Practice of Adaptive Leadership* (2009) by Heifetz, Grashow and Linsky.

On a practical level, there is also room for further research. A key characteristic of Sacks' understanding of hope is that it neither can be calculated in advance, nor be fully developed without living it. This study remained a bit abstract, because it contributed to a mainly theoretical discussion. But it is only in doing that we learn what it means to develop a hopeful response to radical uncertainty in climate change. The proof of the pudding is in the eating. In this study a public Sabbath emerged as key public institution in a transformative response to climate change. To speed up a social response to climate change, reinventing a public Sabbath, conceptualised as a workplace of hope, should be an important priority for further research and policy. Much work has to be done to design it as a convincing workplace for all involved and to measure its influence. A first step would be constructing a hope design studio to provide the conditions needed to develop such a workplace.

Last but not least, in this study TR focussed on the shared problem of radical uncertainty in the context of climate change. Climate change is just one of issues addressed by the Sustainable Development Goals (SDG's). TR can also be developed in the context of other SDGs that include radical uncertainty.

Bibliography

- Nesbitt, P.D. (2017). *Indaba! A Way of Listening, Engaging, and Understanding across the Anglican Communion*. New York, NY: Church Publishing.
- Sacks, J. (2000). *A Letter in the Scroll: Understanding Our Jewish Identity and Exploring the Legacy of the World's Oldest Religion*. New York, NY: Free Press.
- Sacks, J. (2005). *To Heal a Fractured World: The Ethics of Responsibility*. New York, NY: Schocken Books.

