5. Transversal Reasoning on Emunah

Abstract

This chapter aims to initiate transversal reasoning (TR) between Sacks' understanding of *emunah* (a type of trust) and Nooteboom's understanding of trust. This TR is part of the larger TR presented in consecutive chapters. First, it is argued that Nooteboom, Bowles, Ariely and Kay & King largely meet the requirements for entering into TR with Sacks in these chapters. The reason for employing TR is to explore its relevance for a social response to radical uncertainty in the context of climate change. The relevance of TR between Sacks and Nooteboom on *emunah* appears in their treatment of what can be described as relational knowledge, a third form of knowledge, besides objective and subjective knowledge. Relational knowledge allows 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 pleas for post-normal science.

Keywords: Transversal reasoning, Jonathan Sacks, Bart Nooteboom, *emunah*, trust, relational knowledge

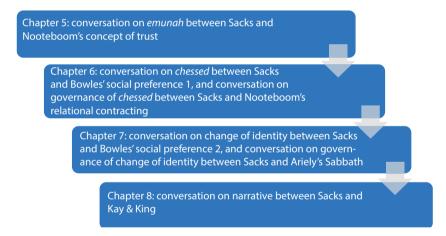
5.1 Introduction

In this chapter and the next three chapters I develop TR between Jonathan Sacks and the economists Bart Nooteboom, Samuel Bowles, Dan Ariely and John Kay & Mervyn King. The point of departure in this TR is Sacks' understanding of hope with the critical assumptions of *emunah*, *chessed* (including the covenant) and change of identity (including the Sabbath), and its narrative mode. There are two reasons for selecting the economists mentioned above. The first reason, as I will argue shortly, is that their work can be constructed as, what I have called in section 3.4, a postfoundational approach to economics. The second reason is that concepts in their work relate to the critical assumptions or narrative mode of Sacks' understanding of hope. These concepts are trust and relational contracting (Nooteboom);

ethical and other-regarding motives, which I call social preference 1; the social embeddedness of people's preferences, which I call social preference 2, (both preferences are derived from Bowles); the Sabbath (Ariely); and the narrative (Kay & King). Due to limitations of space, I focus on Nooteboom's *Trust* (2002), Bowles' *The Moral Economy* (2016), Ariely's *The (Honest) Truth About Dishonesty* (2012) and Kay & King's *Radical Uncertainty* (2020). Let me be clear, this TR should be seen as a pilot study for constructing a conversation between theology and economics on radical uncertainty regarding climate change. Beyond this study, some other economists can be added to this conversation, for example Daniel Kahneman with his *Thinking, Fast and Slow* (2011) and Raghuram Rajan with his *The Third Pillar* (2019).

TR follows the structure as displayed in figure 5.1 below.

Figure 5.1 Thematic structure of the transversal reasoning



Each turn within TR consists of two parts.

Part 1 is about the question whether a critical assumption or the narrative mode of Sacks' understanding of hope and the concept of the economist concerned can interact. And if so, to what extent similarities and differences can be found. Do the concepts used by Sacks 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?

Part 2 concerns the relevance of the conversation in part 1 for a social response to radical uncertainty in the context of climate change.

Before entering into TR, the economic contribution in TR will be explored: Nooteboom on trust (5.3), Bowles on social preference 1 (6.2), Nooteboom

on relational contracting (6.4), Bowles on social preference 2 (7.2), Ariely on the Sabbath (7.4) and Kay & King on narrative (8.2).

5.2 A postfoundational approach to economics

In order to allow for a successful TR between Sacks and the economists, the first question that has to be addressed is whether the work of the economists can be constructed as a postfoundational approach to economics. Therefore their work must, to a large extent, meet the four key requirements of van Huyssteen's postfoundational approach (section 3.3). I have already argued that Sacks exhibits the four required characteristics of this approach (section 4.2). In the following I will assess the extent to which the work of Nooteboom, Bowles, Ariely and Kay & King may also contain these required postfoundational characteristics:

(1) *Embeddedness of rationality*. This characteristic recognizes the contextuality and the embeddedness of all human reflection in human culture, and therefore in specific scientific and confessional traditions.

Nooteboom has a background in mathematics and econometrics. He was professor of Innovation at several universities in the Netherlands, until his retirement in 2008. In his view, trust is included in the roots of the modern economic research tradition, namely in Adam Smith's *Theory of Moral Sentiments* (1759). However, he argues that the attention to trust was later sidetracked because of the dominance of the neoclassical school within economics (Nooteboom, 2002, p. 7). Such an argument shows that for Nooteboom economic thinking is not based on universal laws, but embedded in certain contexts, here expressed in different schools of thinking.

Bowles has a background in economics. He directs the Behavioral Siences Program at the Santa Fe Institute and taught economics at Harvard University. Bowles maintains that one cannot talk abstractly about the phenomenon of rationality within economics. He traces the origins of what he calls the 'conventional economic assumptions' of objective knowledge, self-interest and fixed preferences back to thinkers like David Hume, Jeremy Bentham and Adam Smith, to the (religious) wars in seventeenth-century in Europe, and the insufficiency of the civic virtues (Bowles, 2016, pp. 16-21).

Ariely has a background in cognitive psychology and business administration. He is director of the Center for Advanced Hindsight and the James B. Duke Professor of Psychology and Behavioral Economics at Duke University. In addition, he holds several other appointments. Ariely recognizes the usefulness of what we have called the 'conventional economic assumptions' in economics (section 2.3). At the same time, Ariely argues that these assumptions are of limited use when it comes to dishonesty. In his view these assumptions have to be extended in order to better understand human behaviour and achieve better outcomes (Ariely, 2012, p. 5).

Kay and King have a background in economics. Kay was dean of Oxford's Said Business School. He has held chairs at London Business School, the University of Oxford, and the London School of Economics. Kay is a Fellow of the British Academy and the Royal Society of Edinburgh. King was Governor of the Bank of England (from 2003 to 2013) and is currently professor of economics and law at New York University and school professor of economics at the London School of Economics. Kay and King recognize both the contextuality and embeddedness of all human reflection, for example by stating that "the meaning of rational behavior depends critically on the context of the situation and there are generally many different ways of being rational" (Kay & King, 2020, p. 16).

Nooteboom, Bowles, Ariely and Kay & King thus recognize the embeddedness of rationality.

(2) *Interpreting reality in all forms of inquiry*. This characteristic points to the interpretation of a shared reality as common ground of rationality in all theology and economics (hermeneutical dimension of rationality).

Nooteboom considers knowledge as always based on a not objective, mental framework. He argues that knowledge includes perception and interpretation of reality. He refers to this approach as the 'interpretative' or 'hermeneutic view' (Nooteboom, 2002, p. 24).

Bowles argues at length that when it comes to designing laws, policy and business organizations, it is anything but prudent to let the behavioural assumptions of conventional economics about the economic agent (employee, student or borrower) be the only ones to interpret human behaviour. The main point in his *The Moral Economy* is that this set of assumptions and related institutions are not objective assumptions of human behaviour, but should be supplemented with ethical and other-regarding assumptions and related institutions (Bowles, 2016, p. 2).

Ariely does not consider the assumptions of conventional economics objective assumptions of human behaviour. He uses insights, for example, from psychology and real-life experiments to supplement the conventional assumptions and interpret reality.

Kay and King criticize modern economics for having lost a great deal in seeking axiomatic rationality, meaning a rationality based on a priori assumptions about human behaviour. By doing so, Kay & King are criticizing, to use van Huyssteen's distinction, a foundational approach to economics. In their view, such an approach fails "... to acknowledge the importance of the human ability to interpret problems in context" (Kay & King, 2020, p. 387). According to them, there are several ways to interpret reality.

Nooteboom, Bowles, Ariely and Kay & King thus recognize interpretation of a shared reality as common ground of rationality.

(3) *Critical reflection*. This characteristic refers to a critical investigation of one's own embeddedness by the participant of an interdisciplinary interaction, embeddedness for example in a certain research tradition or a confessional tradition.

Nooteboom has investigated the assumptions of economics. On the one hand, he criticizes a positivistic, what Huyssteen calls foundational, approach to economics. On the other hand, he rejects, to use van Huyssteen's terms, an extreme relativistic nonfoundational approach to economics. (Nooteboom, 2002, pp. 24-25) Nooteboom seeks to employ what we have called a postfoundational approach to economics.

Bowles argues at length in his *The Moral Economy* for relaxing the conventional economic assumption of self-interest and including ethical and other-regarding assumptions in the economic analysis.

Ariely outspokenly criticizes the assumptions of conventional economics. He contends that these assumptions should be supplemented with insights from other research traditions to achieve a better understanding of human behaviour and achieve better outcomes.

Kay and King oppose a foundational approach to economics connected to a particular school of thought (e.g. neoclassical, neo-Keynesian, Austrian or behavioural). They argue for a willingness "... to draw on any or all of these schools of thought if they offer relevant insight in the context of a particular problem. We are suspicious of all 'schools' which claim to provide a wide range of answers to problems based on a priori assertions of a general kind about the world" (Kay & King, 2020, p. 397).

Nooteboom, Bowles Ariely and Kay & King have thus critically reflected on the assumptions of their own research traditions.

(4) *Problem solving*. This characteristic of a postfoundational approach considers problem solving the most central and defining activity of all research traditions.

Nooteboom is inspired by the American pragmatism of authors such as Dewey, James and Peirce, in the sense that this pragmatism does not claim absolute truths. In later work, Nooteboom has argued in line with this pragmatism that "ideas evolve in adaptation to reality, as a function of their success in action... Truth is not something eternal that we contemplate, as

in Platonic philosophy, but something that develops in the world, in action" (Nooteboom, 2012, p. 66).

Bowles argues in his *The Moral Economy* for including ethical and other-regarding motives (social preference 1) on grounds of prudence. For Bowles, prudence is the virtue of pragmatic wisdom, and includes problem solving. He maintains that a synergy between self-interest and ethical and other-regarding motives is necessary for effective policy (Bowles, 2016, p. 7).

Ariely aims to contribute to an understanding of what causes dishonest behaviour in daily life. At the end of his book, as a next task, he points to some mechanisms to combat dishonesty (Ariely, 2012, p. 9).

For Kay and King, the role of an economist is to be a problem solver. In their view, economics is a problem-solving science (Kay & King, 2020, pp. 398-399). But, they continue, if economics is a problem-solving science, the relevant test of economics is its problem-solving capabilities. Kay and King point out that when the financial crisis struck in 2008, economic models were of little help because they describe a stable and unchanging structure of the economy. Kay and King insist on including radical uncertainty as fundamental in economics in order to make it a problem-solving science (again) (Kay & King, 2020, p. 340).

Nooteboom, Bowles, Ariely and Kay & King thus consider problem solving the central activity of their work.

To conclude this section, I have shown above that Nooteboom, Bowles, Ariely and Kay & King largely meet the four requirements of van Huyssteen's postfoundational approach. Therefore they can be regarded as employing a postfoundational approach to economics that allows them to enter into TR with Sacks. Now I continue with the economic contribution of Bart Nooteboom on trust.

5.3 The economist Bart Nooteboom on trust

In this section I focus on the concept of trust in Bart Nooteboom's book *Trust* (2002). One can argue that the focus of *Trust* is on relationships within and between firms. However, Nooteboom also goes beyond this focus. In *Trust* he seeks to provide "... a comprehensive and systematic treatise of trust, covering all its requisite complexity, while trying to achieve coherence and conceptual clarity" (Nooteboom 2002, p. x). This book can be seen as an example of economists paying attention to the role of trust in economic

analysis in recent decades.¹ The reason I choose explicitly for *Trust* is that Nooteboom combines trust with the uncertainty inherent in the human condition (Nooteboom, 2002, p. 188).² In the following I give a description of Nooteboom's concept of trust.

Nooteboom describes trust as a complex and slippery notion, although this "... does not necessarily make it diffuse in the sense of unclear or imprecise" (Nooteboom, 2002, p. 7). In order to give a comprehensive and systematic analysis of trust, he ascribes to trust a four-place predicate. This predicate is based on Aristotle and can be described as follows: (1) someone, the trustor, trusts (2) someone (or something), the trustee, (3) in some respect, (4) depending on the external conditions. (Nooteboom, 2002, p. 38) I will now consider the four elements of this predicate in more detail:

- (1) Trust entails a subject, i.e. someone or something that trusts (the trustor). Nooteboom describes this subject primarily as a person who trusts, but he argues that the subject can also be a group of people, for example an organization (2002, p. 59).
- (2) *There is an object, i.e. someone or something that is trusted (the trustee).* For Nooteboom, the object of trust can have two meanings, (A) people or (B) things and institutions. (A) Trust with regard to people is about trust in individuals or in a group of people, such as an organization. (B) By trust in things Nooteboom refers to trust in material objects like a car. By trust in institutions he refers for example to God, the law, the government. Nooteboom defines an institution as enabling, constraining and guiding action and being durable and more or less inevitable (Nooteboom, 2002, p. 55). When it comes to trust in institutions, Nooteboom uses the term institutional confidence instead of trust. For Nooteboom, an important difference between trust in people (trust) and trust in institutions (confidence) is that confidence refers to bigger or wider systems or entities that can hardly be influenced by (a group of) individuals and are more or less inevitable. Nooteboom gives the example of a judge to refer to confidence. Usually, people are not in a position to choose a judge or to influence his or her judgement. People can only submit to what is imposed on them. If people choose to bribe a judge, we might speak of trust, according to Nooteboom.

¹ Since Nooteboom wrote his book, the field of study has grown further. See for example Lewis (2008) and Sapienza, Toldra-Simats & Zingales (2013).

² More recent work of Nooteboom related to the topic of trust is his philosophical book *Beyond Humanism* (2012) and a more popular book in Dutch *Vertrouwen* (2017).

- (3) The third element of the predicate is about the internal conditions or reasons for trust in people. Nooteboom distinguishes two internal conditions: trust in someone's skills (competence trust) and trust in someone's motivations (intentional trust). Competence trust relates to the other's willingness to behave to the best of his or her competence. Intentional trust relates to the other being cooperative rather than opportunistic (Nooteboom, 2002, p. 9). According to Nooteboom, there are better and worse reasons to have trust. An evaluation of the evidence of trustworthiness may result in certain responses to increase or restore trust, like a training to improve someone's competences. Therefore, in Nooteboom's view, "trust is, or should be, subject to development, to learning" (Nooteboom, 2002, p. 38).
- (4) The fourth element of the predicate is about the external conditions of trust in people, such as the context of action. This element relates to the question if it is reasonable to expect someone to remain loyal at any cost. Examples here would be contexts like a golden opportunity offered to the trustee or the extreme case of remaining loyal to friends under torture (Nooteboom, 2002, p. 46).

Nooteboom has developed this four-place predicate of trust in order to give a comprehensive and systematic analysis of trust. Generally speaking, Nooteboom's view is that trust can be mutual, however he states that it is seldom completely balanced. For example, one can expect some conditions to exceed his or her competence or commitment to perform (Nooteboom, 2002, p. 38). Nooteboom argues that 'real trust' between the trustor and trustee should be added to the economic analysis of knowledge and trust. Real trust "... entails loyalty to an agreement or to a partner, even if there are both opportunities and incentives for opportunism" (Nooteboom, 2002, p. 192). Real trust can be mutual, but it doesn't have to be (completely) mutual, for example due to a difference in developed competences and external conditions. For Nooteboom, real trust reduces opportunities for opportunism on the basis of some degree of loyalty (Nooteboom, 2002, p. 113).

The above description of Nooteboom's understanding of trust provides ingredients for TR between Sacks and Nooteboom on *emunah*.

5.4 TR between Sacks and Nooteboom on emunah

This section develops TR between Sacks and Nooteboom on *emunah*. In 5.4.1 the question is whether and how Sacks' concept of *emunah* and

Nooteboom's concept of trust interact. Section 5.4.2 explores the relevance of this conversation for a social response to radical uncertainty in the context of climate change.

5.4.1 On emunah

Sacks and Nooteboom converge in their answer to the question of how to deal with radical uncertainty. They both point to the importance of trust. However, a key question that then emerges from Nooteboom's predicate of trust is the following: What or whom does one trust when it comes to radical uncertainty? Nooteboom refers especially to real trust in connection with radical uncertainty. Real trust is a type of trust based on a relationship that seeks to include the interests of both oneself and the other. People motivated by real trust are more willing to honour an agreement, even if the situation is not in their interest, than people motivated purely by self-interest. For Nooteboom real trust *reduces* radical uncertainty by limiting opportunities for opportunism on the basis of some degree of loyalty. What or who is it that Sacks has trust in when it comes to uncertainty? One can contend that Sacks' emunah is expressed in Nooteboom's predicate as people's trust in God. Nooteboom refers in his analysis on trust only briefly to God. He defines God as an institution. Following Nooteboom's definition of an institution, God can hardly be influenced and is more or less inevitable. Sacks would argue that Nooteboom's understanding of God is a Greek conception of God, maybe even an idol. God is then unchangeable, the unmoved mover and beyond time. Sacks highlights another concept of God related to emunah, namely the biblical God. It is the God of history: the God of Abraham, the God of Jacob, the God of Martin Luther King and so on. (Sacks 2012, p. 83) By using the metaphor of 'the biblical God as light' (section 4.8.1) I have tried to clarify Sacks' concept of the biblical God. The biblical God then can be seen as a point of reference from which to perceive and understand reality. This point of reference opens a perspective on a form of knowledge, an epistemology, that can be described as relational knowledge, or in the words of Sacks, da'at or intersubjective knowledge (Tirosh-Samuelson & Hughes, 2013, p. 117). The biblical God orients us to a perspective on reality in which people have the possibility to create meaning together. Nooteboom is right in the sense that God cannot be influenced. The biblical God orients us to a particular perspective on reality that is already there, a dimension in reality, and will not change. However, for Sacks, the biblical God is not an institution that is inevitable. The biblical God is a possibility. People are invited to claim the potential of this possibility and by doing so to start learning how to embrace radical uncertainty. They are not and cannot be forced to respond to this invitation. In essence, *emunah* allows not only for *reducing* radical uncertainty as Nooteboom's real trust does. *Emunah* makes it possible to *embrace* radical uncertainty by creating meaning based on relational knowledge in the midst of radical uncertainty.

Besides the concept of God, another diverging line is on the concept of hope. Nooteboom does not come up with the concept of hope in his book *Trust.*³ For Sacks, hope is a fundamentally related concept that intersects with emunah. Hope is the foundation for trustworthiness to which Sacks' tradition refers with God. Hope can be strengthened by acts of trustworthiness, but hope remains the foundation of trustworthiness and not the other way around. Hope includes profound situations of radical uncertainty, both on a micro and macro level. Nooteboom's real trust, by contrast, relates especially to small-scale interactions within and between firms. For Sacks, hope is best expressed in the narrative of the Exodus. The Exodus includes several layers, has an open future, invites people to acts of trustworthiness, directs them towards freedom, considers human beings as having a free will, and is about individual and societal transformation. Hope, expressed in the terms of this narrative, provides a coherent framework that gives meaning to the whole of relationships. Hope takes seriously the present situation, but also shows that something better is possible. The narrative mode as such is only implicitly present in Nooteboom's book, namely in his brief part on scenarios. The reason for this is that a scenario can be seen as having a dual structure consisting of a technical and a narrative mode.

A last diverging line is that for Nooteboom the initial surrender needed for trust to face radical uncertainty is blind (Nooteboom, 2002, p. 84). He argues that in the face of radical uncertainty "... a leap of unreasoned trust is always needed" (Nooteboom, 2002, p. 44). To use another quotation: "... where the gap of uncertainty yawns, we must surrender to trust or die from inaction" (Nooteboom, 2002, p. 200). Sacks, on the contrary, argues that trust seen as *emunah* does not require an unreasoned 'leap of faith'. He maintains that *emunah* has a solid foundation, namely a dimension of hope in our reality. One can still argue that trust in this dimension demands a leap. However, Sacks would never call such a leap 'unreasoned'. For Sacks, trust in the biblical God takes place within a tried-and-tested relationship. The reason for this is that the biblical God has shown throughout history, from the patriarchs and the matriarchs to Martin Luther King and others, that He can be trusted. At the same time, the name of the biblical God 'I will

be what I will be' is a statement about the future (section 4.9). God can be trusted that He will be there in the radically uncertain future, in a liberating perspective, but how God will be there cannot be known in advance.

TR between Sacks and Nooteboom on *emunah* limits itself to a comparison, because, in essence, Sacks' concept of *emunah* deepens and extends Nooteboom's understanding of trust regarding radical uncertainty. Therefore TR on *emunah* does not call for debate.

To conclude, Sacks and Nooteboom converge in highlighting trust in order to provide a response to radical uncertainty. However, a key question in TR is: What do they mean when they refer to trust? TR shows that Sacks' understanding of *emunah* deepens and extends Nooteboom's analysis of trust, in particular his understanding of real trust.

- (1) *Emunah* highlights 'God' as a relational perspective on reality instead of considering God an object in a subject-object relationship.
- (2) The relational perspective on reality is not limited to small-scale interactions, but underlies the whole of reality, including macro-scale interactions.
- (3) This perspective not only *reduces* radical uncertainty, but *embraces* radical uncertainty by orienting us to something liberating beyond what we can express with our words and thoughts in the present.
- (4) *Emunah* is part of a cluster with hope. Hope underlies trust, and is best expressed in the narrative of the Exodus that gives meaning to the whole.
- (5) *Emunah* does not demand a leap of unreasoned faith, but refers to relational knowledge that underlies reality and has shown in history that it can be trusted and will be liberating in the future.

In section 6.5 the interaction between Sacks and Nooteboom continues with a discussion of the governance of *chessed*.

5.4.2 On climate change

What is the relevance of a conversation between Sacks and Nooteboom on *emunah* for a social response to radical uncertainty in the context of climate change?

The relevance of the interaction is that it familiarizes us with relational knowledge, a third form of knowledge besides objective and subjective knowledge, that allows people to embrace radical uncertainty in the context of climate change. In section 2.3 we defined objective knowledge as knowledge which is independent of an observer's viewpoint or bias.

In section 2.7 I argued that objective knowledge meets its limits when it comes to radical uncertainty in the context of climate change. The lack of objective knowledge can be compensated by subjective knowledge. Subjective knowledge is defined as the knowledge an individual or a group of individuals has about a situation or phenomenon based on personal opinions, biases, and arbitrary preferences (section 2.5). However, when it comes to climate change radical uncertainty is at centre stage. Therefore subjective knowledge can lead to conflicting outcomes of studies, as illustrated in the Stern/Nordhaus-controversy. How then to proceed?

The conversation between Sacks and Nooteboom opens a perspective of relational knowledge as an additional form of knowledge for dealing with radical uncertainty in the context of climate change. The conversation orients us towards hope, best expressed in the narrative of the Exodus, as a form of relational knowledge to interpret radical uncertainty. Hope belongs to a cluster with emunah (particular kind of trust), chessed (particular kind of love) and change of identity, and the related institutions of covenant and public Sabbath. Each concept in this cluster will play its role in TR in the next chapters. In discourses surrounding climate change, elements of such a form of relational knowledge can already be found, for example, in recent work of Van der Sluijs. Van der Sluijs has argued for complementing objective knowledge with post-normal science to deal with radical uncertainty (Van der Sluijs, 2012). Post-normal science, as understood by Van der Sluijs, is based on three defining features. First, it acknowledges the existence of radical uncertainty. Second, it recognizes the existence of a plurality of legitimate perspectives. Third, it requires an extended peer community that includes representatives from social, political and economic domains who openly discuss various dimensions of uncertainties in the available body of scientific evidence and the implications for all stakeholders with respect to the issue at hand. (Van der Sluijs, 2012, pp. 176-177) The relational knowledge highlighted by the interaction between Sacks and Nooteboom is related to a post-normal science in the sense that both forms of knowledge seek to complement objective knowledge with a form of knowledge that takes radical uncertainty seriously. A difference is that Van der Sluijs does not explicitly refer to hope and related critical assumptions of emunah and chessed, and the related institutions of covenant and Sabbath. At the same time, Van der Sluijs' recognition of a plurality of perspectives and an extended peer community relate to Sacks' assumption of chessed.

To conclude, the relevance of TR between Sacks and Nooteboom on *emunah* is that it familiarizes us with relational knowledge, a third form of knowledge besides objective and subjective knowledge. Relational

knowledge, expressed in a narrative of hope, has the potential to embrace radical uncertainty in the context of climate change. TR deepens contemporary debates regarding climate change that seek to complement objective knowledge.

5.5 Conclusion

This chapter started by assessing the extent to which the work of Nooteboom, Bowles, Ariely and Kay & King allow for a postfoundational conversation. I concluded that they can be regarded as employing a postfoundational approach to economics, which makes it possible to develop TR between Sacks and these economists. I then initiated TR by developing a conversation on emunah between Sacks and Nooteboom's concept of trust. In TR Sacks and Nooteboom converge in highlighting the relevance of trust as a relational form of knowledge in responding to radical uncertainty. In TR it becomes clear that they diverge in their understanding of the concept of God, their use of the concept of hope, and what they consider the foundation of trust. Regarding radical uncertainty in climate change, TR familiarises us with a third form of knowledge besides objective and subjective knowledge, in order to create a fuller understanding of a social response to radical uncertainty in the context of climate change. TR deepens contemporary debates on post-normal science regarding climate change that seek to complement objective knowledge.

The following chapter continues TR with a conversation on *chessed* between Sacks and the economists Bowles.

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