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Preface to the English Edition

Epistemological relativism is a vast field of research that is composed of the relativity of truth, knowledge, reality and rationality. In this book, I will discuss all of these fields, but this book is not meant to be a general overview of epistemological relativism. Its aim, instead, is to present a new approach to relativism that is based on the concept of points of view. For that, I will present a precise definition of points of view in this book: in a point of view, an aspect represents an object for a subject. This means that points of view are always about choosing the features of an object.

Viewpoint relativism is the hypothesis that epistemic questions are viewpoint-dependent. Therefore, we cannot answer, for example, whether statement p is justified without referring to a point of view. This hypothesis does not support global relativism, according to which, all epistemic questions are viewpoint-dependent. The general criticism that relativism disproves itself does not apply to the local relativism that I endorse. Very often, relativism’s critics assume that according to relativism, all points of view (or frameworks) are equally as good. In reality, not many relativists support this kind of extreme relativism, and I myself reject it by demonstrating that points of view can be compared and weighed using different criteria. Relativists do accept that there are no neutral criteria with which to choose points of view.

This whole book can be seen as a development and a test of viewpoint relativism by applying its ideas to the different areas of epistemological relativism. Especially interesting are the cases about the relativism of truth, knowledge and reality. In each of these cases, I will show that we can formulate viewpoint relativism naturally and relevantly. Perspectivism, which has gained attention in the last few years within philosophy of science, is also compatible with viewpoint relativism. The confrontation between realism and antirealism is visible throughout the book. As a parallel, I also examine the confrontation between absolutism and pluralism. Especially the increased interest towards epistemic pluralism establishes a good context for discussing relativism. Even without having to say it, it is clear that a book such as this that discusses such broad topics is left somewhat cursory in parts: it is rather an outline of viewpoint relativism than a definitive description or proof of a final theory.
This English version of the book is based on the Finnish book published in 2018. However, this book is not a direct translation. I have gone over the whole text and honed several of the arguments and specified many of the concepts. Especially useful was the comments of the anonymous referee of the manuscript. I followed the intention of the Finnish edition to keep the book as readable as possible for all who know the basics of philosophy. The intended audience is students of philosophy, as well as scholars from other disciplines who are interested in epistemological questions. Therefore, the book contains a short historical background of relativism, as well as a larger contextualisation of various discussions about epistemological relativism. However, the book might also be interesting to scholars, where it participates in recent discussion about relativism (topics like pluralism, faultless disagreements, new relativism and points of view). Also, the treatment of truth in the context of viewpoint logic opens some new perspectives to develop relativism.

Helsinki, Finland
September 8, 2019

Antti Hautamäki
The epistemic landscape of our time is full of different opinions and beliefs. Relativism is a philosophical theory that helps us understand this pluralism. Disagreements are not, by any means, always caused by mistakes, but truly different experiences of the world can lie behind them. We view the world from our own point of view. Relativism tries to capture our intuitions about true disagreements.

In this book, I develop and defend viewpoint relativism. It is a form of relativism where statements of knowledge are put in relation to points of view. A point of view is a way to examine reality from a certain aspect. Nothing can be discussed without assuming some point of view. Pluralism does not mean that all points of view are equally as good. Quite the opposite, they are very different in value in terms of different objectives. Viewpoint relativism emphasises a critical attitude towards points of view. It is not the lazy extreme relativism that accepts everything. This is why the general criticism towards relativism does not apply to it.

Although this book is not a textbook as such, it is still the first broad Finnish introduction to epistemological relativism. In it, I discuss the main points of contention about truth, knowledge and reality and the general answers that are given for them. The things I discuss in this book are not simple, but I have written it as clearly as possible, avoiding the jargon customary to philosophy. It is my hope that the content of this book is illuminating to everyone who is interested in philosophical questions about knowledge and truth. The book is useful for all students, but it should be recommended reading especially for students of philosophy. Developing viewpoint relativism by relying on the most current philosophical discussion makes it interesting to academics, as well. The literature I have used in the book can provide a picture of the scope of the discussion on relativism, as well as of its historical continuum.

Relativism questions established ways of thinking, but bold thinking is exactly the King’s way to philosophy.

Helsinki, Finland

Antti Hautamäki

May 21, 2018
Introduction

We live in a time where everything seems to be relative. We can see this well in ethi-
cal dilemmas, but there is also debate over the nature of knowledge and truth. We
even talk about living in a “post-truth era”. However, the concept of the relativity of
knowledge is not new. Sophists as early as in ancient philosophy have denied the
existence of an objective truth. It has been claimed that Protagoras said that man is
the measure of all things. This is how he came to canonically define what relativism
is. And Plato’s critique of Protagoras became the paradigm for critics of relativism.
There has been an ongoing discussion on relativism since those days. A significant
amount of energy has been used within the field of philosophy to deny relativism,
but it has still persevered on the agenda of philosophy. Although Protagorean scepti-
cism is relatively easy to disprove, many of the other types of relativism are stable
and able to withstand critique.

The central question within relativism is how to deal with differences in opinion.
Situations where completely opposing opinions clash are familiar to us all. We
might completely disagree on issues such as whether democracy is in crisis or
whether the autonomy of universities is in danger. We are inclined to believe that
only one point of view can be correct. However, under relativism, it is possible that
we can be justified in our disagreement on fundamental questions about morals and
knowledge. The differences in opinion can indeed be caused by differences in per-
spective. It is in this way that relativism approaches the problem of the relativity of
knowledge.

Without denying the significance of the relativism of morals, this book focuses
on the relativism of knowledge, which is called cognitive or epistemological relativ-
ism. Cognitive relativism can be associated with truth (alethic relativism), rational-
ity, knowledge (epistemic relativism), or existence and reality (ontological or
conceptual relativism). In this book, I will address all these aspects of relativism.
They are not independent of each other, and the differences between them are not
obviously clear. The relativism of truth is the strongest type of relativism, in that the
other types of relativism can be introduced and explained by it. In addition to all the
types being connected, many other areas of philosophy, such as logic and the phi-
losophies of mind and language, must be broached when addressing relativism.
A philosophical analysis of relativism is challenging. Because each researcher defines relativism in her or his own way, there is no commonly accepted definition of relativism. This makes both defending and criticising relativism difficult. Even though there is no consensus on the definition of cognitive relativism, the following characterisation can be used to approach the discussion.\textsuperscript{1} Cognitive relativism states that

(1) Knowledge (or truth, justification etc.) is always relative to some particular framework (culture, language, point of view, evaluation standard, etc.).
(2) No framework is privileged over all others.

According to the first condition, knowledge (truth or justification) is dependent on the framework (or point of view) in which statements are presented. Therefore, absolute claims independent of frameworks do not exist. Meanwhile, the other condition denies that any one framework is better or more correct than any others. This can be expressed by saying that no neutral criteria exist to arrange the frameworks into a hierarchy.

Although I address the different variations of cognitive relativism, this book focuses on developing viewpoint relativism. According to viewpoint relativism, there is no viewpoint-independent way to examine the world. Our knowledge of the world is always filtered and interpreted through the lenses of individual points of view. Some aspect of reality is taken or chosen to represent reality. For example, one can examine a societal phenomenon from a democratic or an economic position. Depending on the point of view, we can perceive a very different view of society. Societal standing, personal interests, experiences, education and activities all affect points of view. According to viewpoint relativism, knowledge can be acquired only through the examination of reality from many different points of view. It is not possible to only use a single point of view to summarise reality, let alone to approach reality viewpoint independently. Even science is based on selecting points of views. Viewpoint relativism emphasises the constant search for new points of views and the dynamic nature of points of views.

The “philosophy” of viewpoint relativism can be condensed into six theses, which I will expand upon and explain throughout this book:

1. There is no viewpoint neutral way to approach reality.
2. All people have their own subjective points of view, but they can be objectified.
3. Each object can be considered from several different points of view.
4. There are no absolute, privileged or universal points of view.
5. Points of view are suited to be improved and changed.
6. Different kinds of criteria can be used to compare points of view.

Relativism is often criticised for meaning that everything should be accepted, as if each point of view is as good as the other. This is a kind of extreme relativism,

\textsuperscript{1}See Baghramian and Coliva (2019, Chap. 1); O’Grady (2002, pp. 1–5); Baghramian (2004, pp. 1–5); and Mosteller (2008, pp. 11–12).
something that I completely reject. In the viewpoint relativism that I defend, different points of view can be compared, and their goodness can be determined by using different kinds of criteria. A particularly important criterion is the fruitfulness of points of view when it comes to practice. In this, I approach pragmatism and its action-centred concept of truth. Viewpoint relativism carries on in the long tradition of relativism, but it interprets relativism in a way that makes it immune to the most common criticisms of relativism.

The purpose of this book is to show that when correctly understood, relativism justifies our ways of gaining knowledge. A good example of this is the pursuit of interdisciplinary studies. Researchers approach the questions in such studies by using several fields of science and various research methods. Relativism offers a philosophical foundation for and approach to interdisciplinary collaboration and dialogue within science.

Developing relativism is also important because many universally approved theories against relativism, such as naïve relativism, and in parts even critical realism, are in many ways at odds and not believable. I believe that a moderate viewpoint relativism offers a defensible alternative to realism. While developing this, bad relativism, not to be supported under any circumstances, can be rejected. In fact, I believe the poorly justified types of relativism are the cause of the rejection of relativism.

Relativism is also a significant theory because it highlights the impermanence of all fundamentalism. As Hanna Arendt, for example, has emphasised, relativism is the key to tolerance and dialogue between cultures. A cultural relativism, where criticising different perspectives is considered to be improper, has become more common within societal discussions. We can find a compromise to this with critical viewpoint relativism, which rejects both absolutism (fundamentalism) and a “lazy” relativism that accepts everything.

The opposition between realism and relativism is one of the main themes of this book. Cognitive relativism is a form of antirealism. Reality and the truth are independent of the human mind, according to realism. Reality determines the verity of statements independently of what we know. Antirealism argues that “the talk of a reality that is completely independent of our judgement is incoherent” (Baghramian, 2004, p. 229).

It is impossible to examine the entire field of cognitive relativism in one book. I have been forced to make choices, and I will primarily focus on the discussion within the sphere of analytical philosophy. Much of this discussion is characterised by the tension between realism and antirealism, which has gotten its canonical shape from the division into metaphysical and internal realism that Hilary Putnam (1978, 1981) made. Without exaggerating, one can say that the majority of the proponents for analytical philosophy have responded negatively to relativism, by which they usually mean extreme relativism. We can see this in significant analytical philosophers, such as the aforementioned Putnam and Richard Rorty, who renounce relativism even though their philosophies can be considered relativist.

I feel that there is a relativistic “turn” happening within analytical philosophy. There has been a new, more positive response to relativism during the last few years.
I believe the cause to this is an increased interest in pluralism as a research subject (Coliva & Pedersen, 2017). According to pluralism, there can be more than one correct answer for many of the questions in the fields of epistemology and metaphysics, depending on the context. Monism, or the school of thought that there can only be one kind of correct criteria for knowledge and truth, rejects that there can be a variety of methods for justifying knowledge. Pluralism offers more opportunities to examine the foundations of knowing. In this context, relativism is seen as a form of pluralism.

Because philosophy is by nature an analysis of concepts, it is good to be aware of the several specific concepts that we must continually use within discussion on relativism. Extreme relativism denies the possibility of comparison between different points of view or frameworks. Global relativism is concerned with all fields of knowledge, while local relativism is concerned with only certain fields and discourses of knowledge. Global relativism is often expressed with the phrase “everything is relative”. Viewpoint relativism is a form of a local relativism that disassociates itself from extreme relativism. It views points of view as dynamic, as developing and changing. Relativism is sometimes combined with scepticism, which denies the possibility of knowledge. However, relativism does allow the possibility of knowledge, even if it denies that knowledge is absolute or universal.²

Viewpoint relativism is not only an ordinary textbook but also a personal standpoint. In fact, the entire book develops and deepens the concept of viewpoint relativism. I am sure that aligning myself with viewpoint relativism will invite some critique, but I believe that revealing one’s own premises furthers philosophical discussion better than approaching points of contention from a supposedly neutral standpoint does. I do not claim that my own interpretation of relativism is the last word in the field. It is as subjective as every other philosophical theory. I consider viewpoint relativism a hypothesis, according to which, many central epistemic questions are viewpoint-dependent and to which there are no answers that are neutral and independent on points of view. Therefore, viewpoint relativism is a hypothesis to be tested, and in this book, I test it against epistemic questions of truth, knowledge and reality. I hope to be able to at least convince my readers of the philosophical appeal of my hypothesis, if not the verity of it.

I will present the content of this book in eight chapters. I examine the historical background of relativism in Chap. 1. After a brief general overview of the background, I discuss Kant’s, Leibniz’s and Nietzsche’s interpretations of knowledge and its dependence on perspectives. As more recent approaches, I present Myers’ systematic pluralism, where pluralism is connected to the main trends in the history of philosophy and Goodman’s worldmaking theory.

I examine the conditions of a philosophical discussion in Chap. 2. Philosophy, by its very nature, is characterised by relativity, which owns to the possibility of defining its basic concepts in many ways. Therefore, we need a core rationality that

² Certain main concepts are repeated in this text. It is good to keep in mind their opposites: universal–particular (or local); objective (or intersubjective)–subjective; absolute–relative (or perspectival).
makes philosophical argumentation possible. In addition, a common language and a certain common shared reality are necessary to uphold a philosophical discussion. It is also argued that an intuitive conception of truth is behind all sophisticated theories of truth, regardless of how they define truth. The supposition of certain common elements (called C-theory) in discussion is not in opposition to relativism but creates an equilibrium between what is shared and what is relative.

I examine the focal point of the book, the concept of points of view, in Chap. 3. We can define a point of view as a triple formed by a subject, an object and an aspect. An aspect is some feature of an object that the subject sets to represent the object. In this chapter, I argue that although points of view are initially subjective, they can be objectified through a shared language. Objectifying them makes it possible to develop and compare points of view. I examine Thomas Nagel’s human-centric cosmology and Marx’s dialectical contradictions as examples of using the concept of points of view. Lastly, I give viewpoint relativism a more precise definition and defend relativism from critique, according to which, it is impossible to defend relativism.

The subject of Chap. 4 is the relativity of truth. I present and evaluate all of the most important theories of truth. Specifically, I weigh the correspondence theory of truth against Alfred Tarski’s semantic theory of truth. I define the concept of viewpoint-dependent truth with the help of the context of statements. It will allow us to keep the intuitive concept of truth but in relation to points of view. The chapter also examines “new relativism”, which is based on the separation of a statement’s context of use and its context of assessment. Finally, I define moderate relativism of truth and compare it to strong relativism and absolutism.

In Chap. 5, I consider the relativism of knowledge and the justification of knowledge. I begin by studying the standard definition of knowledge and its problems, such as the Gettier problem. Then I analyse the issue of objective knowledge and present a new concept of objective knowledge based on points of view. In this chapter, I defend the plurality of justification and propose that epistemic points of view are a selection of epistemic systems used in justification. I consider a special case of justification, a dispute about the heliocentric system. A specific theme of the chapter is the incommensurability of frameworks, specifically Thomas Kuhn’s theory of the scientific revolutions. I answer affirmatively to the question of whether Wittgenstein can be considered an epistemological relativist.

Chapter 6 is dedicated to conceptual pluralism and conceptual relativism. I defend the conceptual relativism, according to which, reality can be structured or articulated in many different ways, depending on which conceptual framework has been used. I criticise the idea of “natural kinds”. I critically study Putnam’s concepts of internal and metaphysical realism and compare them to the external realism presented by John Searle. I do not see any essential difference between internal and external relativism, especially when Putnam’s late opinions are taken into consideration. Finally, I show how the central issues of conceptual relativism—the identification and categorisation of objects—could be analysed formally by applying the theory of conceptual spaces.
I apply the insight gained from the previous chapters to the philosophy of science in Chap. 7. Scientific realism has been a predominant paradigm in the philosophy of science. It holds theories as literal representations of reality that are either true or untrue. The correspondence theory of truth is seen to be one of the cornerstones of scientific realism. In this chapter, I criticise the correspondence theory of truth and present an alternative based on the concept of a model. I present the perspectival realism invented by Ronald Giere, which can be seen as an alternative to scientific realism and as an application of viewpoint relativism into the theory of science. At the end of the chapter, I present the standpoint methodology that Sandra Harding introduced, which is a popular approach in the field of gender studies. This methodology is in agreement with viewpoint relativism.

I examine the question of the role of truth in society in Chap. 8. I define critical viewpoint relativism, which accepts pluralism but suggests that all points of view should be viewed critically by analysing their backgrounds and weighing the choices made within them. I analyse changing expertise and the thesis of the “post-truth era”. I compare the attitudes of objectivism and scepticism towards the societal meaning of truth and conclude that both of these “schools” are severely biased. Finally, I discuss epistemic disagreements and ways to manage them.

In the Conclusion, I summarise the central themes of this book and place viewpoint relativism in relation to the different types of cognitive relativism. I also consider the broader societal significance of viewpoint relativism, specifically in terms of dialogue and tolerance.

In a separate section, I describe the background of the book and the development of my own thoughts towards viewpoint relativism. The references that I have used are presented at the end of the book.
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Chapter 1
The Historical Background of Relativism

Abstract  Epistemological relativism has been defended and criticised since ancient philosophy (Baghramian M, Relativism. Routledge, London, 2004). At the beginning of this chapter, I create a short introduction to the history and development of epistemological relativism from Protagoras to today’s relativists. After this, I introduce a few philosophers who have been significant in the development of relativism. First, I introduce Kant’s understanding of knowledge and its construction. Then, I bring forth two notable perspectivists. G. W. Leibniz claimed in his book, Monadology (1898), that every monad has its own perspective of reality. The diversity of perspectives is one of the riches of the world. All of F. Nietzsche’s philosophy is often characterised as perspectivism, according to which truth is always perspectival. After this, I introduce A. Myers’ systemic pluralism, which defends the diversity of different philosophical perspectives from a metaphysical standpoint. Even though Myers has largely been forgotten, his philosophically justified thoughts about pluralism are still topical. In the end I present Nelson Goodman’s theory of worldmaking, which represents a radical form of relativism.

1.1 A Look into the History of Relativism

The sophist Protagoras (481–420 B.C.E.), who worked in Athens, was the first significant representative of philosophical relativism.1 His most famous statement is “man is the measure of all things; of the things which are that they are, and of things which are not, that they are not,” (Plato, 1979, 152a1.3). Plato (427–347 B.C.E.) and Aristotle (484–322 B.C.E.) both criticised Protagoras’ relativism, which they claimed overturned itself (the so-called “peritrope argument”) and led to contradictions. Many critical ancient philosophers, such as Pyrrhonists, were sceptics who denied the possibility of knowledge rather than relativists.

Relativism did not have a significant place in philosophy in the Middle Ages, after the period of Ancient History, partially due to the criticism of Plato and Aristotle. The French humanist, Michel de Montaigne (1533–1592), is seen to be

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1 Even before Protagoras, Heraclitus (fourth century B.C.E.) arrived at relativism due to his thoughts concerning universal flux.
the first significant relativist and sceptic of the Modern Era. He was first and foremost a cultural relativist who paid attention to the changes in human experience during different periods of time and in different countries. Another significant early cultural relativist was Giambattista Vico (1668–1744), who is best known for the differentiation he made between social and natural sciences. In social sciences, societal-historical context affects how we understand ethics, the social status of a person and societal institutions.

Immanuel Kant (1724–1804) and Friedrich Nietzsche (1844–1900) are probably the two modern philosophers who have affected relativism the most before the twentieth century. Although Kant was not a relativist, his philosophy still contained differentiations and principles that could be used to make relativist conclusions, such as the differentiation between the world of things, the noumenal world, and the phenomenal world that can be sensed. Nietzsche’s perspectivism is considered to be a prototype of relativism. According to his perspectivism, humans are limited and finite beings who examine everything from a certain point of view or perspective. I will discuss Kant and Nietzsche more thoroughly further on.

The twentieth century is a turning point for discussion on relativism (Baghramian, 2004; O’Grady, 2002). While relativism before this time was a mere subplot of philosophy, the twentieth century contained many events that increased the popularity of relativism. The worldview of natural sciences experienced some profound changes at the turn of the century. Particularly, non-Euclidean geometry, the theory of relativity, and later, quantum mechanics, all changed our perception of reality and its structure. The old Newtonian mechanics worldview crumbled.

New changes were also made on the front of social sciences. Cultural anthropologists demonstrated how significantly conceptions about human beings, ethics and family varied from one culture to another. According to cultural relativism, people’s views are based on their unique experiences and their cultural backgrounds. Cultural relativism was supported by linguistic relativism, according to which human thought is controlled by unconscious linguistic structures. According to Benjamin Whorf (1897–1941), our minds are structured through the linguistic systems of a “world in flux”: “The world is presented in a kaleidoscopic flux of impressions which has to be organized by our minds – and this means largely by the linguistic systems in our minds” (1956, p. 213). Whorf’s studies partially influenced the linguistic turn of twentieth century philosophy. More studies were done about the connections between language and thought, and the relationship between language and the world. Wittgenstein was, without a doubt, the most well-known representative of this turning point.

Ludwig Wittgenstein (1889–1951) has influenced the conception of many of the central themes and directions of modern philosophy. *Tractatus*, published in 1921, was influential in the birth of logical positivism, while the posthumously published *Philosophical Investigations* (1958a) was a central work in the philosophy of ordinary language. Wittgenstein discussed various questions about thought, language, logic, knowing and action in these and in many other (posthumously published) works. Many philosophers have come to relativist conclusions from Wittgenstein’s reasoning, especially leaning on his concepts of language-games and forms of life.
Postmodernism influenced relativism to be a popular school of thought among humanities and social sciences at the end of the twentieth century. Postmodernism is a reflection of the linguistic turn, but interpreted culturally. Paul O’Grady (2002, p. 2) uses the term “social turn” for this, by which he means that the social context of the usage of language is taken into consideration. Postmodernism is not, in fact, a uniform trend, but a comprehensive term for many different thinkers. One of the most significant trends pre-dating postmodernism was the post-structuralism favoured by French philosophers (e.g. Derrida, Foucault, and Lyotard).

Physicist Alan Sokal incited the “science wars” with an article of his that negatively affected the popularity of postmodernism. In 1996, in an academic journal representing postmodernism, Social Text, Sokal was able to publish an article that he claimed was complete nonsense. In revealing this, he incited an extensive discussion about postmodernism, which Paul Boghossian, a well-known critic of relativism, considered to be proof of how widely “dubious” relativism had spread within academic circles.

Possibly the most interesting discussions about relativism at the turn of the century have been in the field of gender studies. A new kind of standpoint theory has been developed, according to which the predominant science is not conducted in an impartial way at all, but is bound in a masculine distortion, in a male point of view. The practices and conventions of science disregard the positions, experiences and knowledge of women, proving that they consider women to be subjective, irrational, illogical and emotional (etc.). Selective epistemology and the criteria of knowledge set by it are biased. They want to use the standpoint methodology to develop a new scientific method or approach to study minorities and marginal groups and to give them a voice (Harding, 2015).2

In this book, I will mainly focus on the discussion on relativism held within the field of analytical philosophy. There has usually been a negative response to relativism in this discussion. Even philosophers who could be considered relativists or close to it have denied being relativists. However, in these cases, they refer to extreme relativism, according which all opinions are equal.

One of the biggest common denominators in the discussion on relativism within analytical philosophy is the division of realists and anti-realists. According to realism, there is an objective reality independent of humans that is the object of our knowledge and that determines what is true and what is untrue.3 We can talk about the world such as it is. According to anti-realism, reality and the truth are dependent in one way or another on the concepts and the points of view of people. The world, to us, is always constructed by our minds. However, this does not mean that the world is a creation of the mind, as idealism presents. Specifically to reject idealism, many relativist positions strive to be a kind of “realism,” which can be seen, for example, from Ronald Giere’s “perspectival realism” (2006, p. 88) and Hubert Dreyfus and Charles Taylor’s “pluralistic robust realism” (2015, p. 154).

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2 I will further discuss standpoint methodology in Chap. 7.

3 See Niiniluoto (1999, 2014) has also criticised epistemological relativism.
Pragmatism is one of the central themes of the anti-realism of twentieth century philosophy (see Haack, 2006; Pihlström, 1996). One of the central concepts of old pragmatism is the fundamental significance of practice to determine the validity of knowledge (J. Dewey, W. James and Ch. Peirce). Only through seeing the success of an action can we determine what we really know about the world. Many “Neopragmatists” (e.g. C. I. Lewis, H. Putnam, W. V. Quine and R. Rorty) continued and developed the tradition of pragmatism.

Along with Wittgenstein, many pragmatist philosophers have had a significant influence on my own thoughts. Especially Putnam’s writings on realism, meaning and truth have been foundations of viewpoint relativism. Putnam’s differentiation between metaphysical and internal realism created an extensive and partially still ongoing discussion within the field of analytical philosophy (see, for example, Putnam 1981). According to metaphysical realism, the world is formed of some solid group of objects independent of the mind. Meanwhile, according to internal realism, we can talk about objects only within some description or theory: This is where the term internal realism comes from.

Relativism has been approached in new ways in the twenty-first century, of which “new relativism” is an excellent example. Included within this group of new relativists is an assortment of researchers whose work is founded on the analytic tradition of the philosophy of language, such as John MacFarlane (MacFarlane, 2014). A central idea of theirs is that truth depends on the context of statements. New relativists bring forth a new context to be examined: assessment.

An interest towards epistemic pluralism, and alongside it, relativism, has sprung up within the field of epistemological research during the last few years (see Baghramian & Coliva, 2019; Carter, 2016; Coliva & Pedersen, 2017). One of the reasons for this newfound interest is the dissatisfaction towards the current theory of knowledge, which is primarily monism, and which presumes that there is only one correct answer to epistemological questions. Pluralism exists to broaden the variety of answers and consider the different ways there are to be correct or justified. In this framework, relativism is a kind of pluralism that emphasises the possible incompatibility of different ways of being correct.

There are now researchers within the philosophy of science who also highlight perspectivity, the most significant of whom are Giere (2006) and Bas van Fraassen (2008). Pluralism, which has gained support in the philosophy of science within the last few years, is significant in terms of relativism because its premise is that we have many true descriptions and theories of the same things that are nonetheless incompatible with each other (Kellert, Longino, & Waters 2006).

1.2 Kant on Constructing Knowledge

Immanuel Kant’s book *Critique of Pure Reason* is considered to be a significant step towards epistemological relativism (cf. Baghramian, 2004, p. 218; Goodman, 1978, p. x). Kant’s own system is not relativist, specifically because according to
him, the forms of perception, time and space, and the categories of understanding, such as causality, are parts of the mechanism of knowledge of human beings, and as such, objective and shared by all, or intersubjective.

What makes Kant significant in relation to relativism is his argument in the critique of knowledge, the core thesis of which is that human beings can gain knowledge only through the phenomenal world, the world of experience. If we attempt to state something about the world as it is, we will arrive at inconsistencies, antinomies of reason.

Kant’s theory of knowledge is constructivist in that sensations give experience content and that the mind shapes this content. Humans perceive all things in time and space, which Kant considers to be the intuitive forms of experience. By using categories, or shared concepts, understanding builds a knowledge of objects. “Our empirical knowledge is a compound of that which we receive through impressions, and that which the faculty of cognition supplies from itself” (Kant, 1964, A 271/ B327). This theory has functioned as the precedent for the differentiations made between the content from sensation and the conceptual schema that are often used in later discussions about relativism.

According to Kant, human beings are inherently capable of forming categories of understanding; they are not derived from anything or gained through experience. Categories are available before experience, or a priori, as Kant expressed it. Kant’s theory of knowledge can be considered non-historical constructivism because its system of concepts used for the construction of the world is unchanging.

It is impossible to delve into Kant’s arguments here. In terms of relativism, one of the central questions is Kant’s conception of things-in-themselves that are outside the reach of knowledge.

There are things given to us as objects of our senses existing outside us, yet we know nothing of them as they may be in themselves, but are acquainted only with their appearances, that is, with the representations that they produce in us because they affect our senses. (Kant, 2004, p. 40, [4:289])

We can only know the way in which things affect our senses. According to Kant, his philosophical standpoint differs from George Berkeley’s (1685–1753) subjective idealism, specifically because it accepts the existence of an external reality and things-in-themselves.

Kant expanded the discussion on realism to also include primary qualities. Locke differentiated primary qualities such as extension, time and weight, from secondary qualities such as temperature, colour and taste. According to Locke, secondary qualities are subjective, dependent on human sensations. Kant went even further and claimed that even all primary qualities are mere appearances. Kant used this to fortify his position that we cannot use our senses to be aware of things as they themselves are because all qualities are secondary: “All of the properties that make up the intuition of a body belong merely to its appearance” (Kant, 2004, p. 41, [4:289]).

Kant’s idea about things-in-themselves can be illustrated by discussing the rays that things send. Human beings can only encounter the rays, but are not able to glean any information about the things generating the rays. It should be mentioned
here that contrary to Kant’s beliefs, viewpoint relativism accepts that one can be aware of the qualities of things, but that this awareness is gained through the application of several points of view. By comparing and combining these points of view, one can try to be aware of the different aspects of things. Thus, Kant’s things-in-themselves “wither” and new qualities are constantly revealed.

Kant is a significant philosopher in terms of relativism, as he demonstrated that (a) all knowledge is based on phenomena and nothing can be known about things-in-themselves, and (b) that all knowledge, starting from the senses, is constructed with the application of the forms of perception (time and space) and the categories of understanding. Kant’s assumption about the apriority and intersubjectivity of the forms and categories of observation, however, is unsustainable. Systems of concepts are historically changing and varied, something that pragmatism has specifically highlighted.

Nelson Goodman (1978, p. x) assigns Kant the place of a pioneer in the history of modern relativism, or the history of “making worlds.” This trend started “when Kant exchanged the structure of the world for the structure of the mind.” The trend is a matter of movement “from unique truth and a world fixed and found to a diversity of right and even conflicting version or worlds in the making.” I will return to these problems especially in Chap. 6.

1.3 Leibniz’s Perspectivism

In Monadology, Gottfried Wilhelm Leibniz (1646–1716) presented that monads have a unique point of view and perspective of the world. Monads are the indivisible basic units of the world: The human soul, especially, is a monad. Very generally stated, it is as though each monad has its own possible world. Leibniz illustrates this with a comparison of a town.

And as the same town, looked at from various sides, appears quite different and becomes as it were numerous in aspects [perspectivement]; even so, as a result of the infinite number of simple substances, it is as if there were so many different universes, which, nevertheless are nothing but aspects [perspectives] of a single universe, according to the special point of view of each Monad. (Leibniz, 1898, § 57)

Leibniz based monadology on a complicated metaphysics (a pre-established harmony, etc.), but without committing to this metaphysics, I consider his ideas on perspective useful for the development of relativism. Especially the following point of view is absolutely essential. Each monad is a kind of living mirror of the world that represents the universe. But “this representation is merely confused as regards the variety of particular things [le détail] in the whole universe, and can be distinct only as regards a small part of things, namely, those which are either nearest or greatest in relation to each of the Monads” (Leibniz, 1898, § 60).

After this, Leibniz (1898, § 60) presents a significant thesis, according to which “it is not as regards their object, but as regards the different ways in which they have
knowledge of their object, that the Monads are limited.” Monads’ perspectives “are limited and differentiated through the degrees of their distinct perceptions.” Monads are limited when it comes to the infinity of the universe: “But a soul can read in itself only that which is there represented distinctly; it cannot all at once unroll everything that is enfolded in it, for its complexity is infinite” (Leibniz, 1898, § 61).

Leibniz’s argument for the existence or the necessity of existence of monads is what they add to the richness of the world. Even though there is only one world and God is absolute, the world would still be poor if it only consisted of God’s all-knowing point of view and did not have any monads. Monads bring forth an infinite number of new points of view, and therefore, in a way, they create an infinite number of universes. Considered from the point of view of the monads, each monad brings something unique to the table that the others do not. Together, these monads represent the universe in all of its wealth. This enriching influence that having multiple perspectives brings to our worldview is one of my most important motives for developing viewpoint relativism.

1.4 Nietzsche’s Perspectivism

The perspectivism and viewpoint-dependency of a knowing human being is especially associated with the philosophy of Friedrich Nietzsche (cf. Hales & Welshon, 2000). Perspectivism considers all existence to be “interpreting existence.” This is based on the infinity of the world:

How far the perspectival character of existence extends, or indeed whether it has any other character; whether an existence without interpretation, without “sense”, doesn’t become “non-sense”; whether, on the other hand, all existence isn’t essentially an interpreting existence — that cannot, as would be fair, be decided even by the most industrious and extremely conscientious analysis and self-examination of the intellect; for in the course of this analysis, the human intellect cannot avoid seeing itself under its perspectival forms, and solely in these. We cannot look around our corner: it is a hopeless curiosity to want to know what other kinds of intelligences and perspectives there might be; e.g. whether other beings might be able to experience time backwards, or alternately forwards and backwards (which would involve another direction of life and a different conception of cause and effect). But I think that today we are at least far away from the ridiculous immodesty of decreeing from our angle that perspectives are permitted only from this angle. Rather, the world has once again become infinite to us: insofar as we cannot reject the possibility that it includes infinite perspectives. (Nietzsche, 2001, § 374)

Nietzsche’s conception of “seeing” is interesting in terms of this book’s theme of points of view. If seeing is generally interpreted as objective and absolute, we then lose the activity and the interpretive function of seeing. Nietzsche discussed this in his book On the Genealogy of Morality:

There is only a perspectival seeing, only a perspectival “knowing”; the more affects we are able to put into words about a thing, the more eyes, various eyes we are able to use for the same thing, the more complete will be our “concept” of the thing, our “objectivity.” (Nietzsche, 2006, § III 12)
Nietzsche defends the perspectivism of knowing here. At the same time, he emphasises viewing things from as many points of view as possible. Objectivity is gained only through many different points of view.

For Nietzsche, perspectivism is the inevitable companion of all knowledge, even scientific knowledge. However, perspectivism starts from the points of view of individuals. In his excellent analysis of Nietzsche’s perspectivism, Robert Salomon (1996) combined Nietzsche’s perspectivism with the *ad hominem* principle. Usually the ad hominem argument is seen as a negative argument: Peter’s concept of justice is unconvincing because he himself breaks the law. However, according to Nietzsche’s ad hominem principle, behind every human thought and opinion, the person always comes from a certain position and places things in a certain context. A person’s point of view comes from the position that they are in. More generally, this is a matter of existing: “The way of knowing and of knowledge is itself already part of the conditions of existence” (Nietzsche, 1968, § 496). Salomon (1996) convincingly shows that the comparability of perspectives is important to Nietzsche. Nietzsche would not, under any circumstances, have approved of a “lazy” relativism according to which everything suffices and is equally as good; all opinions and knowledge should be evaluated first and foremost according to how they contribute to life.

The ad hominem principle does not only concern “uneducated” laypeople, but it is also a functional principle in science and philosophy.

I have gradually come to realize what every great philosophy so far has been: a confession of faith on the part of its author, and a type of involuntary and unself-conscious memoir; in short, that the moral (or immoral) intentions in every philosophy constitute the true living seed from which the whole plant has always grown. Actually, to explain how the strangest metaphysical claims of a philosopher really come about, it is always good (and wise) to begin by asking: what morality is it (is he –) getting at? Consequently, I do not believe that a “drive for knowledge” is the father of philosophy, but rather that another drive, here as elsewhere, used knowledge (and mis-knowledge!) merely as a tool. (Nietzsche, 2002, § 6)

Nietzsche did admit that a scientific mind and an educated person possess a stronger drive for knowledge and truth than an uneducated person:

…with them, there might really be something like a drive for knowledge, some independent little clockwork mechanism that, once well wound, ticks bravely away without essentially involving the rest of the scholar’s drives. (Nietzsche, 2002, § 6)

Nietzsche emphasised that it is more than just rational thought that is the basis of our beliefs. An internal world is not only cognitive, it also contains feelings such as hopes and fears, aspirations and intentions. In *The Gay Science* (2001), Nietzsche discussed “the force of impulses in knowledge” (§ 110). Our thoughts are “the shadows of our sensations – always darker, emptier, simpler” (§ 179). Nietzsche questioned what people mean when they talk about knowledge, and answered: “Nothing more than this: something unfamiliar is to be traced back to something familiar.” This concerns the rejection of everything foreign and unusual, the fear of the unknown. Philosophers, however, are not much better in this, according to Nietzsche: “Is it not the instinct of fear that bids us to know?” (§ 355). More positively said, knowledge is the application of the new to the old and finding similarities: “In our
thought, the essential feature is fitting new material into old schemas… making equal what is new” (Nietzsche, 1968, § 499).

I will come back to questions about knowledge and truth later, but in this context, I want to mention that in terms of Nietzsche’s discussion on anti-relativism, it is specifically human subjectivity that is under sharp analysis and under healthy questioning in terms of claims of objectivity: They could actually be concealed subjectivity and perspectivity. However, Nietzsche is more of a stylist, an idealist and a visionary, rather than a careful arguer, which complicates the interpretation of his texts and utilising them in the discussion on relativism.

1.5 Myers’ Systematic Pluralism

Henry Alonzo Myers (1906–1955) developed a particularly systematic theory of pluralism, according to which several perspectives exist (Myers, 1961). Myers built his theory on the philosophical systems of Heraclitus (~540–475 B.C.E.), Baruch Spinoza (1632–1677), George Wilhelm Friedrich Hegel (1770–1831), Leibniz and Henri Bergson (1859–1941). Myers’ theory is interesting particularly because of his strong historical background in philosophy and his dialectic approach: Philosophical theories are different perspectives on reality. He believed that philosophy is progressing towards perspectivism: “The trend of modern philosophy has been… gradually away from the classical conception of a single system and toward what may be called systematic pluralism” (Myers, 1961, p. 7).

Human beings’ personal points of view are the starting point to this. A point of view has both subjective and objective components. A subject’s uniqueness is specifically subjectivity. Meanwhile, objectivity comes from the fact that a human being’s point of view is directed at the objective world, reality. Myers called reality a “metaphysical object.” By this, he meant that reality is external to knowing, something that knowing is directed at. Human observations are observations of the world. Human thought is directed at the world, and human experience originates from existing in the world.

Particularity and universality are always present in human points of view. Each perspective is inevitably particular because it is unique. However, because perspective is also inevitably a perspective of something, namely of reality, it is also common, universal (Myers, 1961, p. 136). An individual’s point of view as a personal perspective gives us true concrete universality, the synthesis of the particular and the universal (Myers, 1961, p. 136). The following things are dialectically combined in a person’s personal point of view:

- subjectivity and objectivity;
- particularity and universality;
- relativity and absoluteness.

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4 Myers adopted the term perspective from Leibniz.
It is impossible to easily separate subjectivity and objectivity, as they are always intertwined. A human point of view always includes “opinions,” the truth and verification of which require separate processes. A central component of this “eliminating” of subjectivity requires shifting to systems of knowledge common to all. According to Myers, the shift from opinion to knowledge happens through systemising ideas in a social arena, which eliminates some of the influence of the persona.

Systems of knowledge are different from individuals’ personal points of view in that they are communally shared and tested. The subjective opinions of individuals have been eliminated from them. Myers called these systems of knowledge impersonal perspectives on a metaphysical object, reality. This perspectivity means that systems of knowledge are always partial, particular, and that no system of knowledge is absolutely true or universal. It is important to note that systems of knowledge are perspectives on reality that can be communicated, while personal perspectives include a lot of subjective elements that are difficult to communicate. There are an infinite number of possible impersonal perspectives.

Myers’ concept of truth is in line with coherentism. “[T]he criterion of the truth of a proposition is always a specific whole, a specific totality, the particular perspective of which the proposition is a homogenous element. The criterion of truth is always an impersonal perspective” (Myers, 1961, pp. 124–125). One criterion of reality is a common view of things: “Things as they appear in impersonal perspective, things which are common to all, they will call realities, facts, knowledge” (Myers, 1961, p. 144).

Myers defined systematic pluralism as a “metaphysical” theory, according to which “reality is known through a number, potentially infinite, of systems of knowledge” (Myers, 1961, p. 181). Each of these systems reveals reality from its own point of view that is determined by the categories that it uses. Because consciousness is always perspectival, an ultimate system, or a system shared by all systems, does not exist. Myers compared systematic pluralism metaphorically to a wheel of a bicycle, where the numerous spokes represent the systems that approach the hub of the wheel, or reality, from different points of view. This is similar to Leibniz’s comparison of the town: We have many different points of view of the same town, and in a way, the town is enriched and expanded by them. Systematic pluralism emphasises that none of these ways of approach is any less real than the others. In terms of relativism, the general justification of pluralism, and especially the idea that reality is gradually revealed through an infinite number of perspectives, are the most interesting aspects of Myers’ pluralism. “Reality comes to us not as one system representative of the metaphysical object, but as infinite systems, each uniting a particular with what is common to all” (Myers, 1961, p. 162).
1.6 Goodman’s Worldmaking

Nelson Goodman (1906–1998) presented in his book *The Ways of Worldmaking* (1978) one of the most impressive contributions to conceptual relativism. According to his theory, there are several actual worlds, not to be confused with the so-called possible worlds that modal logic studies. The argument for assuming several worlds is based on the idea that we have contradictory but equally “true” descriptions of the world. For example, the statements “The sun always moves” and “The sun never moves” are both true, but not directly compatible with each other. They are true, but under different frames of reference. These kinds of situations are what motivated Goodman to talk about different versions of the same actual world. If I have correctly understood Goodman’s theory, the versions are “descriptions” of the world, and the only ways for the world to become recognised: “All we learn about the world is contained in right versions of it” (p. 4). The versions are constructed from different concepts and operations, the ways of worldmaking. Such operations are, for example, composition and decomposition, weighting, ordering, and deletion and supplementation. In addition to linguistically describing the world, it can be depicted with pictures, music, dance, poetry, etc. Worldmaking does not start from nothing, but from some already existing versions of the world.

Some versions of the world are right, and some wrong. In terms of verbal versions, the truth can be relevant, but it cannot be tested with agreement with the “world.” This is because there is no world outside of the versions. This is why Goodman would rather discuss the rightness of a version than truthfulness. The truth of a version means a certain kind of internal coherence:

> A version is taken to be true when it offends no unyielding beliefs and none of its own precepts. (Goodman, 1978, p. 17)

Goodman also says that the truthfulness of statements and the rightness of descriptions is primarily a matter of fit: “fit to what is referred in one way or another, or to other renderings, or to modes and manners of organization” (p. 138).

When we analyse Goodman-type metaphysics, we cannot avoid a certain kind of ambiguity: in what sense is worldmaking describing the world, and in what sense is it creating it? Colomina-Almiñana paid special attention to this: “Making a version of the world and making the entities that the version of the world talks about are two very different things” (2018, p. 42). We could also ask if the different versions are the world’s ways to be or facets, and therefore metaphysical entities, or if they are ways to know the world. If they are the world’s ways to be, we are talking about metaphysical pluralism, and if they are ways to know, we are talking about epistemological pluralism.

This aspect [ambiguity, AH] of Goodman’s theory seems to problematize his whole system, since one must accept that one thing is the way we speak about the world and another very different thing is the way that the world is, or might be. (Colomina-Almiñana, 2018, p. 42)
In any case, *The Ways of Worldmaking* reveals some of the most striking questions in relativism. Especially the relationship between *ways to know* and *ways to be* is relevant to almost all types of cognitive relativism. The other important issue is the *problem of criterion*: how to evaluate different versions of the world, be they cognitive or artistic or whatever.
Chapter 2
Conditions of a Philosophical Discussion

Abstract As its method, philosophy uses argumentative discussion. Philosophy does not often appeal directly to observations or experiences, although they have a place in argumentation as well. Because philosophy is discursive, it delves in the realms of language and the use of language. Defining concepts is a central theme. The rules and argumentation principles of rational discussion are another cornerstone of philosophy. I defend two things that are seen to be conflicting: philosophical relativity and common core rationality. Both are necessary in order to balance each other out. I argue that a certain intuitive and common conception of truth and reality is necessary in order to conduct philosophical discussion. This does not, however, mean that we are in philosophical agreement over the fundamental nature of truth and reality. However, this intuitive conception gives us a starting point, a basic understanding of the development of philosophy. For this reason, much of this chapter is focused on common understanding, common language and shared experiences of reality. This common level is often bypassed in philosophical conversation, even though it includes philosophically interesting questions that especially Wittgenstein highlighted.

2.1 Core Rationality in Philosophy

In this section, I will discuss two factors that balance each other out. On the one hand, philosophy is characterised by justified disagreements that result from not only semantic questions, but also differences in background assumptions. On the other hand, philosophers strive to argue on behalf of their own positions and against those of others. This argumentation is based on rules, many of which are commonly accepted. The success, or even the meaningfulness, of a philosophical discussion is dependent on a certain minimum set of shared principles. In this section, I present my own conception of what this kind of core rationality could be.
2.1.1 Philosophical Relativity

The question of relativism is intricately connected to various fields of philosophy, such as the philosophy of language, logic, metaphysics and the philosophy of mind. We should therefore ask whether a single correct or predominant philosophical position on relativism exists. Philosophical questions cannot be solved by referring to observations or specialised sciences such as neuroscience, despite them having a function in philosophical argumentation (Searle, 2007). Furthermore, philosophical fields and theories do not succumb to yes–no answers, let alone correspond to reality. Philosophical rhetoric does often discuss the truthfulness of theories, forgetting how many background assumptions theories contain. If anything, philosophical theories are positions on how a concept, such as knowledge or justification, should be defined and interpreted. These positions can be justified in various ways, and instead of discussing the truthfulness of theories, we should discuss their defensibility in relation to chosen background assumptions. If defending them is not possible, we are forced to rely on persuasion as a last-ditch attempt: “Proof in philosophy can be nothing more at bottom than persuasion” (Lewis, 1956, p. 23). Philosophers often refer to rational intuition as a way to justify their philosophical leanings, but intuition itself is only one way to justify claims (Hales, 2006, pp. 9–47; von Wright, 1985, pp. 189–214).

In his book *Philosophical Relativity* (1984), Peter Unger strives to demonstrate that for many important philosophical questions, there is no clear or correct answer. These include questions about knowledge, causality (cause-and-effect) and explanation. Unger’s argument is as follows: A philosopher’s preferred answer to a philosophical question depends on the assumptions that she has adopted in relation to the specific problem. The answer’s central assumptions are always somewhat arbitrary and are not governed by objective truths or even logical or linguistic facts. One set of assumptions lead to a certain answer, and another set of assumptions lead to another answer. None of the facts related to the problem can determine which sets of assumptions are chosen. Unger calls this *philosophical relativity*.

Unger refers to semantics as one of the central arguments for philosophical relativity. The deciding feature of a philosophical problem can depend on the meaning of the linguistic expressions or semantic conditions used to describe it. For example, the problem of knowing can very well depend on which definition is assigned to the word “knows” in the statement “Galilei knows that the Earth revolves around the sun.” Knowing can mean intuitive knowing or knowing based on the best available evidence. It is from this reflection that Unger settles on the concept of semantic relativity.

Suppose that there is no objectively right answer as to how a certain expression should be interpreted; no unique determinate meaning to be assigned. In such cases, if there really are any, we will have *semantic relativity*: One set of assumptions leads to one semantic interpretation, one set leads to another, and there is nothing to decide objectively in favour of either set. (Unger, 1984, p. 5)
At relativity’s core lies the idea that there are no objective or neutral criteria with which sets of assumptions can be placed into an order of priority. The relativity of philosophy is indeed often the result of the semantic relativity of essential philosophical terms. Unger also points out a societal aspect of semantic relativity: “For a given group of speakers, there is no single semantics that is unique, objectively real semantics of that group” (1984, p. 6).

My own position in the discussion on relativism is that at the very least, interesting opinions contain assumptions that are not often highlighted and whose justifications often lead to other philosophical disagreements. I still do not consider rational discussion on relativism to be futile or hopeless. It is important to remember the hypothesis of semantic relativity while engaging in it. We have very different ways in which to interpret essential philosophical terms. Nobody has the authority to say which interpretation is the correct one. One of the conditions of discussion is to attempt to clearly define one’s own concepts and to recognise the different interpretations and background assumptions of key concepts. After comparing different interpretations, some interpretation (or definition) may turn out to be more relevant (but not the right one) in relation to the aims of conceptualisation.

Steven Hales goes even further than Unger in relativising philosophy in his book Relativism and the Foundation of Philosophy (2006). According to Hales, propositions in modern philosophy are acquired and justified by appealing to rational intuition. He compares rational intuition to other methods of acquiring philosophical beliefs about things such as values, free will, etc. He presents the Christian revelation and the usage of hallucinogens in rituals as examples of this. All three methods of acquiring basic beliefs are based on a certain perspective, which is a way of knowing. These methods are conflicting because they lead to contradictory beliefs. Hales claims that there is no way to set any one of these perspectives above one another. We lack neutral standards with which to make comparisons (Hales, 2006, pp. 119–120). Therefore, the basic methods of creating philosophical knowledge are relative, and relativism is unavoidable in philosophy. Hales limits relativism to only philosophical beliefs and methods, and does not accept a universal relativism according to which everything is relative, including natural science.

2.1.2 Principles of Argumentation and Core Rationality

It is impossible to have a philosophical or scientific discussion without setting some common rules that determine what discussion is, how it is conducted, and how differences in opinion are addressed. These rules determine how we understand rationality. There is a certain paradox, where philosophers who might view rationality very negatively still attempt to convince others by using rational arguments.

Many philosophers have presented their own rules for rational discussion, beginning with Plato and Aristotle. For example, Descartes, Kant and Pascal are well-known among those who have set rules for rational thinking. The rules for rational discussion and argumentation were under heavy scrutiny in twentieth century
philosophy of language; the classical work *Uses of Argument* (1958) by Stephen Toulmin is a good example of this.

The strong relativism of rationality and logic is a significant form of cognitive relativism. Its problem is the denial of common prerequisites within discussion. But philosophical discussion is not possible if it does not have some shared principles and preconditions. It is because of this that I renounce the strong relativism of rationality. It would lead to an incapability of justifying relativism. Renouncing strong relativism does not exclude that rationality can be understood in different ways in different fields of science and in different cultures. We can still find shared notions.

In the following sections, I will outline the very basic rules and features of rationality. I strive for core rationality, without which we cannot hold a serious discussion, and which enables the construction and comparison of different kinds of arguments. Core rationality does not cover the entire field of rationality, but it provides a common structure or foundation for it, within which very different principles and rules can exist. The details of rationality can differ even if the basic principles are shared.

René Descartes presented his own rules for finding truth in his book *Discourse on the Method*. He had four of these rules (Descartes, 2006, p. 17).

The first was never to accept anything as true that I did not incontrovertibly know to be so; that is to say, carefully to avoid both prejudice and premature conclusions; and to include nothing in my judgements other than that which presented itself to my mind so clearly and distinctly, that I would have no occasion to doubt it.

The second was to divide all the difficulties under examination into as many parts as possible, and as many as were required to solve them in the best way.

The third was to conduct my thoughts in a given order, beginning with the simplest and most easily understood objects, and gradually ascending, as it were step by step, to the knowledge of the most complex; and positing an order even on those which do not have a natural order of precedence.

The last was to undertake such complete enumerations and such general surveys that I would be sure to have left nothing out.

Descartes’ views about knowledge represents a rationality according to which the criterion of the truth is not perceptual but intellectual and deductive. “[W]e ought to investigate what we can clearly and evidently intuit or deduce with certainty” (Descartes, 1954, Rule III). Intuition is at the centre stage of acquiring knowledge, along with deduction.

By intuition I mean, not the wavering assurance of the senses, or the deceitful judgment of a misconstructed imagination, but a conception, formed by unclouded mental attention, so easy and distinct as to leave no room for doubt in regard to the thing we are understanding. (Descartes, 1954, Rule III)

In this model of acquiring knowledge and truth, certain knowledge can only be acquired by following reason and its principles. Mere observation, without intervention from reason, cannot lead to certain knowledge. Descartes’ rationality was
influenced by the geometric pattern of knowledge, where theorems are derived from intuitively clear basic assumptions (axioms).

Blaise Pascal (1623–1662), mathematician and philosopher, also held similar positions as Descartes. In *Of the Geometrical Spirit* (1909–14), Pascal described the ideal method of proof.

This true method, which would form demonstrations in the highest excellence, if it were possible to arrive at it, would consist in two principal things the one, in employing no term the meaning of which had not first been clearly explained; the other, in never advancing any proposition which could not be demonstrated by truths already known; that is, in a word, in defining every term, and in proving every proposition. (Pascal, 1909–14, Paragraph 7)

Pascal used Euclidean geometry and its axiomatic system as a model for this. All demonstration starts from axioms, which, according to Pascal, are intrinsically certain. Meanwhile, proving theorems is based on deductive logic, which transfers the truth of the premises to the theorems. According to current understanding, intrinsic certainty is not required of axioms: Any set of statements that theorems can be derived from can be a set of axioms. Each axiomatic system has to assume a set of basic terms that cannot actually be defined.

Pascal presented also a useful advice, how to prove believes, when they direct proving is not possible or is difficult. It might be called Pascal’s principle. To quote:

> It is an infirmity natural to man to believe that he possesses truth directly; and thence it comes that he is always disposed to deny every thing that is incomprehensible to him; whilst in fact he knows naturally nothing but falsehood, and whilst he ought to receive as true only those things the contrary of which appear to him as false. And hence, whenever a proposition is inconceivable, it is necessary to suspend the judgment on it and not to deny it from this indication, but to examine its opposite; and if this is found to be manifestly false, we can boldly affirm the former, however incomprehensible it may be. (Pascal, 1909–14, paragraph 60–61)

Pascal’s principle is a principle of indirect proof, which is sometimes also called the *dialectic principle*. In it, a claim is indirectly justified by demonstrating that its negation cannot be true (reduction ad absurdum). The point of Pascal’s principle is to prove a difficult or even “inconceivable” statement by examining its opposite, and if the opposite turns out to be false, we can affirm the statement. The principle suggests that if a proposition is difficult to prove, one should try to falsify its negation. This principle is not directly connected to the law of excluded middle (pv~p). Its core is the law of double negation: ~(~p) <-> p.1

Rational deduction from intrinsically certain axioms is tempting, but it is epistemologically unsound and insufficient for the needs of empirical knowledge. Intrinsically certain axioms or premises cannot be outside of logic and mathematics. Observations and experiences, gained especially from actions, are necessary in order to generate empirical knowledge. Statements based on experiences are not intrinsically certain or intuitive, and they cannot be derived from reason. They do not precede experience; they are not a priori, as Kant expressed it.

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1 Note that indirect proofs (double negations) are important in classical mathematics, but they are not accepted in intuitionistic mathematics.
Paul O’Grady rejects relativism of rationality and defends minimal core rationality, which gives essential and very basic rules to rational discussion, but does not set limitations on choosing specific methods. The four basic principles of *minimal rationality* (O’Grady, 2002, pp. 140–141), loosely worded, are:

1. **Non-contradiction**: It is not rational to accept contradictions;
2. **Coherence among beliefs**: Our belief systems should not include implicit contradictions or claims that weaken each other, such as *p* and *probably not-p*.
3. **Non-avoidance of available evidence**: We should not avoid evidence that has an impact on the truthfulness or non-truthfulness of our beliefs.
4. **Intellectual honesty**: We should acquire as much evidence as possible and weigh arguments and counter-arguments against each other fairly.

Next, I will examine some other suggestions for principles that define rationality. Paul Grice’s theory about the maxims of cooperation will be a subject of closer examination. The success of communication is absolutely necessary for action and the pursuit of truth. Communication is a collaborative effort, and how well it succeeds is dependent on how much the speakers trust each other. Paul Grice called this principle that requires communication the *Cooperative Principle*. Its idea is to make one’s own contribution to discussion as pertinent and functional as possible while taking the situation, objectives and direction of the discussion into account. It can be considered the axiom of informative discussion.

Grice (1989, pp. 26–27) has encapsulated the content of this principle into four kinds of maxims: quantity, quality, relation, and manner. The *Quantity* contains a supermaxim giving the obligation to “try to make your contribution one that is true.” It contains two more specific maxims:

1. Do not say what you believe to be false.
2. Do not say that for which you lack adequate evidence.

The maxims of *Quantity* ask you to make your contribution as informative as is required, but not too informative. The maxim of *Relation* is simply “be relevant”. The maxims of *Manner* oblige one to be perspicuous: avoid obscurity of expression and ambiguity and be brief and orderly. The goal of these maxims is to guarantee as effective an exchange of information as possible. According to Grice, maxims do not reflect how people usually communicate. Instead, it is reasonable to follow them. Maxims are not intended to be used as instructions for authors or poets. But misunderstandings can possibly never be avoided because the mental and referential worlds of speakers could considerably differ from each other. The maxims of quality correlate with the virtue of truthfulness. For example, Immanuel Kant considered lying to be an absolutely wrongful act: We must maintain truthfulness.

Grice’s maxims are linked to what our utterances say and what we would like to say or suggest. Utterances contain conventional meaning, but they might produce nonconventional meaning, which Grice (1989, p. 24) called implicature. If my wife says to me that “The garbage can is full,” the implicature for me is a hint or an order to empty it. Implicatures are sensitive to the cooperative principle and to contexts of communication.
Grice’s maxims have been criticised as too rational. Metaphors, for example, are a vital part of common language usage and they are not compatible with maxims (cf. Lakoff & Johnson, 1980). Even if I were to accept this critique, I still agree with Grice in that it is sensible to follow maxims when we aim for as objective a discussion as possible and a shared understanding. Metaphors are useful for producing or conveying new ideas, but they can be very ambiguous and could therefore break the Maxim of Manner, according to which a speaker must be perspicuous, like avoid ambiguity. For example, the statement “a bear market dominates the economy” is not clear without background information.

Dan Sperber and Deirdre Wilson (1986) have developed a relevance theory based on Grice’s theory that holds an important place in the study of communication. It considers context to be significant in conveying messages. The speaker should convey exactly as much information as necessary to the hearer in order to communicate the correct interpretation of the message in the given context. Not everything has to be said, because the context conveys additional information to the hearer. “Relevance theory” gets its name from its theory that the speaker has an assumption about what is relevant to the hearer. Relevance is subjective and depends on the hearer.

While Grice’s maxims are instructions for the speaker, the principle of charity is an instruction to the hearer. According to the principle, the hearer should try to maximise the firmness and the truthfulness of the arguments presented by the speaker by conceiving them as being as rational as possible. If the statement can be interpreted in many different ways, the principle of charity obliges the hearer to interpret the other’s speech in a way that it is maximally intelligible and truthful (Baghramian, 2004, pp. 153–154). Therefore, rational communication requires mutual trust and following certain principles, even if these principles have not been agreed upon in writing.

Many empirical studies have shown that humans are not necessarily very logical (Gardner, 1987; Grice, 1989; Kahneman, 2011). Communication has many other objectives than just communicating things that are believed to be true. Wittgenstein (1958a, § 23) discussed the different ways to use language, which he called language-games, and which include pronouncement, questioning, commanding, promising, assuring, arguing, etc.

On cognitive grounds, we can claim that humans have a will to truth, or that humans aim for truth in their beliefs (Hatcher, 2002, p. 60). It is generally assumed that believing a claim means believing specifically in the truth of the claim. However, this is not so, as we can have beliefs despite not having a conception of truth, or we can have beliefs that cannot be explained or justified (“The sun rises every day”). The belief that p is true is a “stronger” belief than just p. Two types of believing can be differentiated: intuitive believing is believing without justifications, and reflective believing is conscious belief in the truth of a statement. Reflective belief can be presented with the following formula:

\[ X \text{ believes (reflectively) that } p = X \text{ believes that } p \text{ is true.} \]
The will to truth is manifested in the aim for reflective beliefs. The theory for the will to truth is strengthened through the fact that we do not accept a claim that conflicts with our beliefs. It is mentally conflicting to believe that p while knowing that p is not true. I call this the principle of consistency. The psychological equivalency of this is the phenomenon of cognitive dissonance, which refers to a situation where a person has conflicting cognitions, such as attitudes. According to the theory, cognitive dissonance occurs when the knowledge and attitudes of a person conflict with one another (Festinger, 1957). Avoiding cognitive dissonance is apparently one of the elements of strengthening the will to truth. The will to truth is a strengthening element in Grice’s principle of cooperation: If you aim for a maximally effective exchange of knowledge, you should follow the maxims.

It is common to divide rationality into theoretical (cognitive) rationality and practical rationality. The former is concerned with giving reasons to beliefs and the latter with acting in a way that is maximally efficient in achieving one’s aims. According to Baghramian (2004, p. 153), a belief B is rational if (1) B is backed by reason(s) R and (2) R is deemed adequate for justifying, supporting or explaining B. For (2), different logical systems are used.

Without going into the details of practical rationality, practical inference can be used to explicate it. Practical inference is a form of inference where the first premise expresses the target or aim, the second premise tells us what the agent considers to be a necessary action for bringing about the target, and in the conclusion, the agent sets herself to do the action (von Wright, 1971, p. 96). For rational action, it is necessary that the target is reasonable, there is enough evidence for the action to bring about the target, and finally, that the agent really sets herself to act.²

We use a common intuitive logic in rational discussion and argumentation, although we continually break its rules. Logic functions implicitly in the background, but we can make logic explicit if necessary. But are we unanimous about logic? The discussion on relativism has partially led to questioning the status and choice of logic (Baghramian, 2004, Chap. 5). People have pointed to the many existing systems of logic, from Aristotle’s syllogism to the various systems of modern-day formal logic (Jacquette, 2006). There are also many common principles of argumentation (Cf. Baggini & Fosl, 2003).

We can also interpret rationality normatively, as the guiding principle to successful communication and research. From this stance, deductive and inductive logics are essential.³ Deductive logic is used to search for the consequences of beliefs and inductive logic is used to make generalisations. It is difficult to conceptualise how any kind of acquisition of knowledge would be possible without applying these methods of logical reasonings at least in some way. I include reasoning based on

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²I will use practical inference in Chap. 8 to analyse the relationship between politics and expertise.

³Abductive logic might be used on par with deductive and inductive logics, but I consider deduction and induction to be fundamental inferences in looking for new knowledge. Abductive logic is the process of forming an explanatory hypothesis; often an abduction is defined as the inference to the best explanation.
these three logics in the normatively understood rationality. Reasoning is the process of forming arguments: drawing conclusions from premises by using certain rules. These two logics can be shortly characterised in the following way (c.f. Flach, 2006).

- **In deductive logic**, conclusions are true if the premises used are true, or the conclusion cannot be contradicted by new knowledge without contradicting some of the premises. For example: All humans are mortal; Socrates is a human; Therefore, Socrates is mortal.

- **In inductive logic**, the general claim is inferred, given that its premises and its conclusion hold true in specific cases. For example: The proportion P of the sample has attribute A; Therefore, the proportion P of the population has attribute A.

In opposition to deduction, which is non-defeasible, induction is defeasible: The conclusion of an inductive inference can be untrue even if the premises are true. These definitions are only tentative and to express them exactly, one needs to specify a formal system with rules of inference.

Based on the previous discussion, I define **core rationality** as a rationality that accepts the following principles. I formulate them informally and referentially.

**Principle of consistency**: We cannot affirm and deny the same statement at the same time and in the same respect.

**Principle of deduction**: If a statement p can be deductively inferred from the premises and if we accept them, then we have to accept p, too.\(^4\)

**Principle of induction**: If a statement p can be inductively inferred from the premises we accept, then we have to accept p, too, with the reservation that it is only probable (the probability given by the rules of inductive logic used).

**Principle of evidence**: If there is (much) stronger evidence towards a belief than against it, we have to accept the belief.

According to the principle of consistency, we could not defend, for example, that some object is both heavy and light to the same degree. The principle of consistency should not be interpreted to mean that it would deny the consideration of contradictory possibilities or the dilemmas and paradoxes of thinking. This principle rather expresses the aim to avoid using contradictory beliefs in the final argument, because they take away from the argumentation.\(^5\)

From the principle of deduction, it follows that if we accept a contradiction, we are faced with a logical trap where all claims have to be accepted. In practice, people strive to isolate a contradiction to some special issue without making dramatic

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\(^4\)The principle of deduction can also be formulated by setting a condition that we also have to *know* that p implies q (the so-called closure principle). The principle can be expressed in epistemic logic as a rule; if Kp and K(p → q), then Kq, where “K” is knowledge operator and the sign “→” is implication.

\(^5\)There are so-said paraconsistent logicians who permit the use of contradictions; see Jacquette (2006).
conclusions from it. In terms of rational discussion, arriving at contradictions leads to a dead end and weakens the argumentation. The acceptance of a contradiction also leads to a mentally strained position: cognitive dissonance. In this principle, by contradiction, I mean the denial and acceptance of the same thing within the same point of view or framework. That the same claim can be true from one point of view but untrue from another does not break the principle of consistency.

The principle of induction expresses the logic of generalisation: We require a certain amount of “positive” cases, and we do not know of any “negative” cases. We may as well use the inductive generalisation “All swans are white” as an example for this. Inductive logic has developed advanced models for the calculation of the probability of generalisations.

I have formulated the principle of evidence on the basis of O’Grady’s minimal rationality. I consider the principles of non-avoidance of available evidence and intellectual honesty that he presented to be important, and I want to include them in core rationality in the form of the principle of evidence. According to the principle, we should weigh all of the arguments relevant to our beliefs, whether they be for or against them; therefore, I use the words “there is…” in the formulation of the principle. We can accept a belief only if the arguments for them are stronger than the arguments against them. Of course, we could refuse to accept a belief that has counter-arguments, but this attitude would soon lead to scepticism, because some counter-arguments can be presented for all claims.

A case in point is mixed evidence, where there is some evidence for a claim p and some other evidence, almost equally strong, for its negation ~p. Then one can suspend to believe or deny p until she has new evidence to settle between p and ~p. Or if this risk-avoiding strategy seems to be too passive, one can simply decide to believe p or deny p, taking the risk of making the wrong choice: to believe something that is not true.

In terms of logic, our beliefs can be divided into two classes. On one hand, a part of our beliefs are basic beliefs that cannot be derived from other beliefs. On the other hand, we have derived beliefs that can be logically derived from basic beliefs. According to foundationalism, there are basic beliefs that are justified without having to refer to additional evidence (Williams, 2001, pp. 81–85). Foundationalism cannot be considered a purely rationalistic position because basic beliefs could be taken to be empirical as well as rational (or intuitive). Rationality is better characterised by fallibilism, according to which beliefs outside of all doubt do not exist (Popper, 1963, Chap. 10). We still consider many beliefs to be certain, as Wittgenstein (1958c, § 341) explained.

As it was previously stated, according to rationalists, basic beliefs must be intuitively self-evident and undisputable. More simply, according to the rationalistic model, the claims that are the basis of knowledge are in the form “A is B,” where B is already included in A. Then all truths would actually be conceptual and analytical. Empiricists do not consider conceptual truths to be nearly sufficient enough for

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acquiring knowledge about the world. Some beliefs must be based on experience, and they should be able to be fallible. The core rationality that I support is not tied to foundationalism.

If we reject foundationalism and support empiricism, we can define a belief system BS (a network of beliefs) to be rational if

1. the BS is consistent;
2. the BS is closed under deductions;
3. all basic beliefs of the BS are backed by empirical evidence and inductive logic.

This is quite a compact way to define the core rationality. Condition (1) expresses the principle of consistency, (2) the principle of deduction and (3) the principle of induction and the principle of evidence. Core rationality obliges you to make your belief system rational.

I have not yet said anything about the so-called law of excluded middle, according to which all statements are either true or untrue, and there is no third option. I do not consider this generally applicable as each claim has its own area of meaningfulness, and the truth value of a statement cannot be sensibly determined outside of it. For example, it is more natural to say that the claim “the number 5 is yellow” lacks truth value than to say that it is untrue. If it were untrue, then in binary logic the claim “the number 5 is not yellow” would become true, which seems absurd. When the statement is inside its area of meaningfulness, then the law of excluded middle is acceptable.

The preceding view shows that rationality can be defined in many different ways. Usually, rationality is defined by indirectly referring to reason. I believe that we can go even further by giving rationality certain rules or principles that would define it. I believe that the core rationality that I define provides the minimal rules necessary for philosophical discussion and argumentation. This does not mean that everyone would accept core rationality. Core rationality is a prerequisite of rational discussion, and therefore a normative element. The previously presented list of the principles of core rationality is not perfect, and not necessarily even satisfactory in all ways, but it does show what kinds of principles are associated with rationality. The most concise characterisation of core rationality only includes the principles of deduction and consistency.

While accepting core rationality as the prerequisite of philosophical discussion, I would still not go as far as to claim this kind of rationality is universal. There is still reason to return to the differences between global and local rationality. According to global rationality, the principles of rationality are considered universal and universally binding. Meanwhile, local rationality is a rationality related to different targets, subjects, studies and debates. Natural sciences and social sciences, for example, use different kinds of principles of rationality and justification. Local

7 Developing these thoughts leads one from classical logic to atypical logic, such as three-valued logic or to supervaluation; see Jacquette (2006); also, Hautamäki (1986). In Chap. 4, we will see that truth is definable only in relation to points of view. If any point of view is not specified in the context of evaluation of a proposition, then its truth value is undefined.
criteria also change with time and from one culture to another. Core rationality is not global rationality, but a kind of normativity that enables rational discussion. It can be considered *meta-rationality*, through which different local rational principles can be compared. This means that although different rational approaches can be incompatible, they are not incommensurable (Baghramian, 2004, Chap. 6.5).8

I believe that core rationality provides a common framework for scientific discussion. No matter which special methods are used, we require consistency, logical reasoning and justification from science. In this sense, core rationality, which includes the principles of deduction and induction, among other things, can be seen as the core of the scientific method (Hatcher, 2002, Chap. IV.3; Okasha, 2002). Other cultures that acquire knowledge may use different principles and criteria of rationality. Core rationality is, at least, rationality for *us*, the practitioners of Western science and philosophy. Then again, certain cognitive scientists and language researchers have come to the conclusion that although so-called “foreign” cultures (or even our own) do not follow the rules of logic familiar to us, universal cognitive structures like homeostasis are still behind human thought process, even if individual and cultural factors have an effect on their realisation (Damasio, 2018, pp. 167–170).

### 2.2 C-Theory: The Common Conditions of Discussion

According to epistemic relativism, we can disagree, with strong justifications, about things. Still, people are in agreement about many things. Is there a contradiction here? How can we explain the fact that we understand each other even when we have very different points of view towards the same things? Disagreement and agreement, and subjectivity and objectivity, do not rule each other out: Disagreement is only possible when comparing it against an adequate frame of agreement. In this section, I will bring forth some central factors that set the conditions for mutual understanding and discussion. These factors are also important because they offer arguments for denying strong relativism, according to which everything is relative.

Many philosophical trends consider mutual understanding and cognition to start from the fact that we live and act in the same world.9 Martin Heidegger (2010) discusses an intersubjective “*lifeworld*” that is the shared background of different horizons. I say this so that we can have a common reality, of which we have the same observations and experiences, although different interpretations. There can be no shared understanding without a common language: All understanding and misunderstanding are linguistic phenomena. Although we interpret many linguistic expressions in different ways, the linguistic expressions still have a reasonably

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8 I further discuss incommensurability in Chap. 6.

9 Examples of this: Dewey (1929); Dreyfus and Taylor (2015); Gadamer (1992); Heidegger (2010); Lewis (1956); Merleau-Ponty (1992).
established meaning for all speakers, which explains why we succeed more often than not in communicating our messages to hearers. A shared world, in which everyone lives, is the background of common meaning. The third building block of shared understanding is the intuitive conception of truth. The prerequisite of communication and discussion is trusting that others are telling the truth, or are telling things how they know them to be. The speakers of a language must have a mutual understanding of what truth means and what the significance of keeping to it is to communication (Grice, 1989).

Each of these three factors is always present in all communication: They form the basis of communication. I use the concepts of C-language, C-reality and C-truth to refer to a common language, a common world, and a common conception of truth. Here “C” means what is common to us. It could also be interpreted as common sense. In terms of philosophy, these C-terms are important in two senses. Firstly, they portray the terms of everyday communication and help to outline the common sense view of the world. Secondly, they are also the background assumptions of philosophical discussion. We cannot proceed in philosophical research without a common language and without a common intuitive conception of truth and reality. This is a matter of the pre-understanding that hermeneutics emphasised (Gadamer, 1992).

I will now sum up these C-terms and their significance to C-theory. According to C-theory, C-language, C-truth and C-reality are the prerequisites of all communication and philosophical research. I present C-theory as a philosophical conjecture, which is a useful and sufficiently clear conception to advance philosophical discussion. More widely adopted, C-theory could function as the platform of discussion or as a common framework. Of course, in philosophical discussion, all starting points are subjected to critical examination and even C-theory is not self-evident. In this section, I will explain the concepts of C-language, C-truth and C-reality, and I believe that this will give a certain credibility to C-theory.

In terms of viewpoint relativism, C-theory has a place in the discussion on relativism. Global or universal relativism makes everything relative. This kind of relativism destroys its own foundation. However, viewpoint relativism is local relativism, according to which relativism has its own boundaries and areas of application. There are areas of knowledge where differences in opinion are fundamental, but also areas where consensus is possible. C-theory supports the everyday experience where despite all the disagreements, humans are in consensus about enough things, especially those that are important in terms of cooperation. We can explain this with the use of the concept of points of view: that different points of view are still points of view towards the same world. It is this consciousness that is one of the central prerequisites of a successful dialogue: An understanding of speakers’ different points of view towards the subject of the discussion is the objective of a dialogue.10 Philosophically, this means that relativity and absoluteness, and subjectivity and

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10 I will present critical relativism in Chap. 8, where the pluralism of points of view is accepted, but the critical valuation of all points of view is emphasised.
objectivity, do not rule each other out. C-theory is used to build equilibrium between relativism and the stability of the shared world. This is why C-theory offers a foundation for developing and defending relativism. However, I should note that viewpoint relativism is not conceptually tied to C-theory, and that the main arguments for it do not require the use of C-theory.

So why mention C-theory in a book arguing for epistemological relativism? First, I refer to C-theory in many arguments and discussions about different types of epistemological relativism, especially in relation to local relativism. Secondly, something like the C-theory is in fact supposed in almost all discussions in philosophy, but rarely mentioned. Like Charles Caton (1963) stresses, technical (philosophical) languages are based on ordinary language, and philosophical arguments also use ordinary language. Thirdly, C-theory is interesting as such—a theory that points out the dialectics of agreement and disagreement, which is a source of relativism.

2.2.1 Common Language

A basic starting point to a philosophical discussion is the reliance on a common language. We always operate within a certain community that has a common language. I call this “common language” shared by a community a C-language. A shared C-language is obviously a strong abstraction, and it is not easy to unambiguously define what this language is. What I call a C-language is also called a natural or an ordinary language (Lyons, 1977; Vähämaa, 2018). In Putnam’s words, a natural language is “the language that we all speak and cannot avoid speaking every day” (2004, p. 43).¹¹

C-language does not necessarily include any special vocabulary, but different technical languages or optional languages, to use the term Putnam presented (2004, p. 43), are built upon it. These are, for example, many professional languages (religious, medical, judicial), the languages of science and technology and “artificial languages,” which include programming languages, the formal languages of logic and mathematical languages of symbols. Philosophical language is also one of the optional languages built upon C-language.

Optional languages are of course a part of natural language, its expansions. C-language can be defined as a part of natural language that all the speakers of a language have to master in order to become recognised as one of the speakers of that language. It is the vehicle of expression used by all the members of the language community, without which nothing at all could be discussed. C-language does not include any special vocabulary or special definitions for words that a regular speaker in command of the language does not need to know; “one may count as a master of

¹¹The concept of C-language is quite ambiguous, of course. Its exact definition is not necessary, however, for my argumentation, in which the distinction between subjective and common sense objective meanings is essential.
the… language without learning these particular sublanguages” (Putnam, 2004, p. 43). There are as many C-languages as there are natural languages. It should not be associated with a lingua franca, which often refers to a language that people who speak different languages (or who are strangers) use to communicate with each other (Mustajoki, 2017).

I got my idea for C-language from Haskell B. Curry’s the concept of U language, by which he means a language that logicians use to communicate with each other and to speak of shared things. U language is a non-formal metalanguage in relation to the formal languages under study. Curry describes U language in the following way:

It is impossible to describe this U language exhaustively. All we can say is that it contains the totality of linguistic conventions which, at the moment, we understand. This may seem vague, but in that vagueness we are no worse off than in any other field of study. Every investigation, in any subject whatsoever, must presuppose that same datum. (Curry, 1963, pp. 28–29)

I am especially interested in the semantics of C-language. Each natural language has a grammar and a vocabulary. But language also has a semantic structure that gives meaning to words and expressions. Most of the semantics of a language are shared by all of the speakers of the language. Still, every person has their own meanings or connotations to many expressions. The speaker of a language wants to express their own meanings in their speech, but is forced to use C-language, which has already fairly established meanings in different language-games.

C-language contains within it the means to talk about itself; for example, we can refer to the words of a language and their meanings. C-language is not closed or unchanging. New words, such as “social media,” are constantly added to a language, and the meanings change, as the meaning of the word “vehicle” has changed over the last two hundred years. The meaning structure of a language can be explicited through dictionaries, definitions and conventions.

I will differentiate between the conventional meanings or C-meanings of a language and the subjective meanings or S-meanings. C-meanings are the literal or standard meanings of a C-language. They are often presented or defined in common language dictionaries. S-meanings are first and foremost built upon people’s experiences. S-meanings are related to the speaker’s meaning, which refers to what a person intends to communicate with a particular utterance (Grice, 1989). C-meanings and the experiences and interpretations of people are crossbred in S-meanings. The point of view of the speaker affects the interpretation of C-meanings and generates S-meanings.

The question of what meaning is, is of course important in this context. Without going into an intricate discussion about that, I adopt a traditional notion of meaning as the significance of expressions. The triangle of signification has been a topic of discussion as early as in Middle Age semantics; its three parts are concept, sign and significatum (Lyons, 1977, p. 96). In Middle Age scholastics, it was thought that the word signifies by means of mediating concepts: sign → concept → significatum. For example, the word “tree” signifies trees through the concept of tree.
In a more general setting, semantics is related to relationships between language, mind and reality. Meanings are in the mind and the mind is about reality (intention). We can also say that the mind represents reality. Language refers to reality. These relations are shown as a generalised triangle of signification in Fig. 2.1. Of course, it is a totally different task to define these elements and their relations (see e.g. Putnam, 1988; Searle, 1981, 1984).

In semantics, the meaning (intension, connotation) of a linguistic expression is separated from what the expression refers (denotes) to. Both the meaning and the thing that is referred to are unfortunately often called meaning. Why there should be a differentiation between the meaning and the referent can be seen from even simple examples: The names Morning Star and Evening Star have a different meaning, but the same referent, as they both refer to the planet Venus. The meaning cannot be restored to the referent.12

Meanwhile, Hilary Putnam (1978, pp. 115–116) argued that meaning is a several-component affair, containing the reference and the stereotype, which are standardised sets of beliefs or idealised beliefs associated with terms. Stereotypes are not for fixing referents but for discussion. Understanding a language is more related to the ability to use it and to stereotypes than to know the referent of expression, according to Putnam (pp. 97–117). The issue Putnam raised, however, is what the role of “meaning” is in fixing the referent. For my discussion, the relevant question is the role of “mental meaning” in communication.

Linguist Ferdinand de Saussure presented his own definition of the sign, which is well-known and central especially in structuralism (Levi-Strauss) and poststructuralism (Derrida, Foucault). For Saussure, the sign is a dual psychological entity that is formed from the sound-image and the concept. The sound-image corresponds to the psychological manifestation of the uttered word (term) of a language

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12 In intensional logic, meaning is the function that provides the referents of terms in each possible world (Hautamäki, 1983a).
in the speaker’s mind (the word uttered in the mind). The sign is the combination of the term (sound-image) and the concept associated with the sign. Saussure used the technical terms signifiant and signifié to signify the sign and its concept (Saussure, 1966, p. 67).

Saussure rejected the simple interpretation according to which language is mostly a process of naming things. For example, that the word “tree” would be the name of a tree. To understand the function of language, we have to examine the concepts behind the words of a language. Through concepts, the speaker of a language can discuss the world and signify certain things. According to Saussure’s view, the bond of the sign between the term and the concept is arbitrary, but the speakers of a language master this bond because they know the language. Saussure does not question the objectivity of signs, or that they are given in a language and that each speaker of the language has a mastery over them.

According to Saussure, communication at its simplest is a process where person A tries to convey her own thoughts to person B using signs (Fig. 2.2). A chooses the sign that corresponds to her thoughts and expresses it to B. Meanwhile, B receives the sign and the concept related to the sign is activated in B’s mind. In the ideal situation, both A and B have the same exact concept of the sign.

For Saussure, language is the system of signs given to speakers of the language. It cannot be chosen. Therefore, it follows that the meanings (concepts) of words are also the given components of the language. Meanings would therefore be objective in terms of the speaker of the language. Newer semantics and especially cognitive neuroscience question the objectivity of meanings.

We know from experience that in communication, people give the same words different meanings (cf. implicatures of Grice, 1989). We can express the following situation by using the above-mentioned differentiation I made between the subjective S-meanings and the objective, conventional C-meanings. We use a common language in communication, the words and expressions of which have a relatively solid C-meaning. Meanwhile, the speakers of a language may give different meanings to the same expressions, so the S-meanings are varied.

Many researchers have made similar differentiations between subjective and objective meanings. Psychologist A.N. Leontyev differentiates objective from

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**Fig. 2.2** Saussure’s model of linguistic communication. (Reproduced from Saussure, 1916)
personal meanings (Leontyev, 1977). Objective meanings belong in the socially shared language, and they have a “supraindividual,” non-psychological existence. Objective meanings refer to the shared world subject to people’s actions and observations. Individual meaning is the connection of expressions to the motives and the personal reality of an individual in this world. It is worth nothing that supraindividual meanings always get tangled up with individual meanings in people’s minds.

The activities or the actions of humans in different situations are at the core of Leontyev’s theory. Instead of approaching language and psychology with an object-subject (ex. stimulus-observation or stimulus-response) model, we should approach them with a subject-activity-object pattern. At their foundation, activities are real activity that are made possible and built by society and the environment. Meanings are anchored first to external socio-historical activities. But the personal activities and consciousness of a person create subjective meanings whose connections to common activity is indirect and mediated. Still, according to Leontyev, they do not lose their socio-historical nature and objectivity.

If we want to make a further differentiation between the objective C-meanings and the subjective S-meanings, it is useful to differentiate sense (sometimes connotation) from meaning. This difference is illustrated by the developer of the theory of thinking, psychologist L.S. Vygotsky (1962), according to whom sense is all those psychological events that come to mind when a word is used. Sense is a multidimensional entity. Meaning is only one of the dimensions of sense, its most established and stable part. Sense changes with context. The word “car” brings forth different senses in a car dealership and in traffic. People’s inner speech is operated through senses and less through meaning (Vygotsky, 1962, pp. 146–147).

Some concepts can be associated with objects or phenomena directly through observation. A significant amount of our basic concepts are these kinds of “ostensive” concepts, such as the concepts of “red,” “sunrise” and “human being.” By pointing, we can highlight a certain object or occurrence, but by doing this, we cannot produce the meaning that is given to objects, what object is in question. For that, we need language and its structures of meaning. If we point at a thing and call it “rabbit,” we interpret the observed occurrence to be a rabbit. If we do not know the word “rabbit,” we must guess what the speaker is referring to when using the word to talk about an observed thing. Observation in itself does not tell us that the thing in question is a rabbit. Here we are dealing with the core questions of cognitive relativism (Quine, 1960; Wittgenstein, 1958b).

Linguist Arto Mustajoki (2012) developed a theoretical model that I think accurately illustrates the subjective meanings of communication. With the help of this model, Mustajoki analysed the underlying factors of misunderstandings between people. In this model, the speaker uses a certain linguistic form to communicate what she wants to say, the meaning. The mental worlds of the discussants, which affect the meaning of an expression, have a huge impact on misunderstandings. Because the mental worlds of the discussants differ, the meanings they have given to the same expressions also differ. The speakers’ different “referential worlds,” the fragments of reality that they refer to when they speak, are also included in this model of communication. Therefore, it is the different mental worlds, the different
meanings assigned to the same expressions and the different referential worlds that are the causes of misunderstandings. Mustajoki’s model (Fig. 2.3) fits well with the theory I have presented about C-language and S- and C-meanings. This model is also procedural because it follows the reception of the message and continues communication if the reception does not seem to succeed.

To understand the role of concepts in cognition, we must pay attention to the relationships between concepts. A simple example is classification; for example, “Human beings are animals,” where the concept of a human being is a subclass of the higher concept of an animal. There are, in principle, an endless amount of relationships between concepts. The relationships of one concept to other concepts are often expressed as definitions that specify the concept’s internal relationships to other concepts. According to C. I. Lewis (1956, p. 83), the very nature of a concept is its internal relationships with other concepts: Concepts have a relational structure. The structures constructed by concepts can also be called conceptual frameworks or schemes.

When a concept is applied to a certain object, its entire relational structure is basically combined with the object. Therefore, a concept does not only refer to objects, but also brings out the special aspect that is to be highlighted. In Lewis’ (1956, p. 68) words, a concept tells us what is essential about an object. For example, the concept of a “car” refers to cars, but it connects cars, for example, to the concept of a “vehicle” and to different discussions about vehicles.

Concepts have a central role in the definition of the identity of objects. Concepts do not only classify objects, but also give them an identity. By this, I mean that

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13Essentiality is not metaphysic but epistemic, to do with what words should be used.
through concepts, we define what an individual is. More specifically, structures of
concepts provide criteria for solving whether the two objects \( x \) and \( y \) are the same
or different objects. This can be expressed as Leibniz’s principle: If two objects have
the same qualities, then they are the same object (Baggini & Fosl, 2003, 5.7).

What qualities we consider while determining sameness depends on our concep-
tual framework. The identity claim “\( x = y \)” is therefore concept-dependent.\(^{14}\)
Logically, “\( x = y \)” is true only if \( x \) and \( y \) refer to the same object, but it is exactly this
reference that is where the problem lies. It is important to note that \( x \) and \( y \) are not
their own entities, but the conceptual framework that is used defines them as enti-
ties. The concept of entities is dependent on the framework, and is therefore a rela-

Now we can clarify what we mean by C- and S-meanings. The \textit{C-meaning} of an
expression is the literal or standard interpretation of the expression in C-language,
which is the same for all speakers of the language.\(^{15}\) While communicating with
others, a speaker must use the established C-language and the C-meanings attached
to it. The \textit{S-meaning} of the speaker is her interpretation of the C-meaning of the
expression. The S-meaning brings forth the point of view of the speaker. The
S-meaning is always dependent on context and the speaker/hearer has her own back-
ground assumptions that affect the interpretation of the language. Lyons calls this
theory of meaning conceptualism: “It defines the meaning of a word or other expres-
sion to be the concept associated with it in the mind of the speaker and hearer”
(1977, p. 112).\(^{16}\)

The S-meaning brings forth a certain aspect or side of a thing that the C-meaning
does not necessarily include. If the hearer does not understand these S-meanings,
she is in danger of misunderstanding. To prevent this, the speaker must try to explain
the thing, point at the subject, show what the thing means in terms of action, etc.
Although there are as many S-meanings as there are speakers, the success of com-
munication shows us that in many cases, there is enough similarity and invariance
between S-meanings. Many things can explain this success in communication; for
example, that people’s experiences of the world and their usages of language in
terms of metaphors, among other things, are similar in their main features.

\subsection{Intuitive Conception of Truth}

Truth, along with knowledge, is one of the main concepts of epistemology. The rela-
tivity of philosophy can be well seen in that there have been many different defini-
tions and theories made about truth (Blackburn & Simmons, 1999; Lynch, 2005;

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\(^{14}\)Identity’s concept-dependency can be accurately defined in the theory of conceptual space, see Sect. 6.4 of Chap. 6 and Hautamäki (2016).
\(^{15}\)C-meanings are often dictionary meanings.
\(^{16}\)Conceptualism here does not refer to Middle Age conceptualism, which was one of the solutions
to the problem of universals. I will return to this question in Chap. 6.
Wrenn, 2015). However, a certain intuitive conception of truth is still used as the basis of philosophical work. Different theories of truth therefore attempt to clarify the intuitive conception of truth. This intuitive conception can be expressed in the following way: “When we say something true, the world is as we say it is” (Lynch, 2005, p. 11).

Aristotle’s characterisation of truth, presented in *Metaphysics*, has been assigned a canonical position. According to Aristotle, “to say of what is that it is, and of what is not that it is not, is true” (1999, Book IV § 7; Met. 1011b 25). I interpret this to mean that *it is true to say something like it is*. If Paris is the capital of France, it is true to say that it is the capital of France. Meanwhile, saying that Marseille is the capital of France would be untrue. The idea behind the intuitive conception of truth is that the truthfulness of a statement depends on if the things are as the statement claims they are. I call this intuitive conception of truth *C*-truth. If truth is dependent on how things are, then truth is not a question of opinion. If someone thinks that the moon is made up of cheese, it does not mean that the moon is made of cheese. Truth is also not wishful thinking: Wishing to be respected does not make anyone respected. *C*-truth can be said to be *objective*, because the truth is not reliant on anyone’s subjective opinions or beliefs (Lynch, 2005, pp. 10–12; Wrenn, 2015, Chap. 2).

The intuitive conception of truth is often expressed as true beliefs corresponding to reality, or as it was stated in Middle Age scholastics, “*veritas est adaequatio intellectus et rei.*” This formatting is often called the correspondence theory of truth: Truth is the correspondence of beliefs and reality. It is thought that such a relationship of correspondence is possible. What this correspondence is and how it can be discovered are key philosophical questions (Wrenn, 2015, Chap. 5). The intuitive conception of truth does not, however, call for any kind of special correspondence relation between language and the world. It is enough that something in reality exists that is expressed by a statement and that *makes* the statement true. The intuitive conception of truth is minimalistic in this sense (Lynch, 2005, pp. 107–116).

The correspondence theory should not be interpreted to mean that our thoughts or statements are some kinds of reflections or images of the world. Then correspondence would be the similarity between the image and the object. Talk of “images” is of course metaphorical because statements and thoughts cannot be literally considered images. The structural similarities between a statement and a situation are also not enough to define truth. If we postulated such kinds of similarities, we would project the structure of language into reality.

The definition of truth should be clearly separated from the *criterion* of truth, with which one can decide whether a statement is true or untrue. That truth can be defined as the (semantic) correspondence of language and the world does not necessarily give us tools to discover the correspondence. A separation must be made...

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17 In its entirety, this definition is “To say of what is that is not, or of what is not that it is, is false, while to say of what is that it is, and of what is not that it is not, is true.”

18 Questions about the criteria of truth and the justification of claims are some of the central problems of epistemology, and I will further discuss them in Chaps. 4 and 5.
between the truth and knowing the truth or being true and taken to be true (Wrenn, 2015, pp. 5–9).¹⁹

Even if we accept the intuitive conception of C-truth into “everyday use,” we do not need to accept it as our philosophical theory of truth. It still provides a basis for philosophical discussion that is then clarified and developed. I wanted to bring up the conception of C-truth early on because we have a strong intuition about it. It is intuition that is the basis of discussion in philosophy, as G.H. Wright, for example, emphasises: The function of philosophy is conceptual investigation, the explanation of conceptual intuitions and interpretation (von Wright, 1963, pp. 4–6; 1985, pp. 204–205).

2.2.3 Shared Reality

The problem of cognitive relativism can essentially be simplified into the question of what reality is. The intuitive conception of reality is that reality is everything that exists. But we do not, by any means, know everything that exists. We do better know the world in which we live. It contains objects and phenomena familiar to us all. Although each of us has different experiences of the world, there are considerable similarities in our experiences. For example, we have numerous similar observations about things and objects, such as the seasons or trees. Even though we do not always test or note that we have a similar conception of the experienced world, in practice we have a very similar conception of the experienceable world. This shared world is not necessarily very extensive, and in any case, it is always a fragment of reality.

I refer to this shared world of experience by the concept of C-reality. With it, I mean our shared conception of the observable and experienceable reality surrounding us. The world, to us, is C-reality. C-reality is a consensus conception of the experienced reality. It is an abstraction in the sense that each of us also has subjective experiences and observations that others do not necessarily have. Therefore, each person interprets C-reality from their own point of view.

Accepting C-reality is reminiscent of Thomas Reid’s Common Sense philosophy (Reid, 2011; Audi, 1995, search term “Reid, Thomas”). Reid opposed Hume’s theory that we are immediately conscious of only impressions and ideas. To avoid the suspicion about the existence of an external world brought on by Hume’s theory, Reid proposed that we directly observe objects. This is how Reid came to support the common sense view of the world. I would like to emphasise that by adopting the concept of C-reality, I do not philosophically bind myself to Reid’s direct realism and common sense philosophy. C-reality shows what the common conception of reality is and how it is populated. Meanwhile, a philosopher can problematise C-reality and argue on behalf of other kinds of realities that are based on quantum physics or metaphysics (e.g. the thesis of Heraclitus that everything flows), for example.

¹⁹ In epistemic logic, the formula (p → Kp) is not valid, but the formula (Kp → p) is.
C-reality is conveyed through common concepts such as house, car, cat, tree, human being, the operational concepts related to them such as to move, to lift, etc., as well as regular observational adjectives such as red, round, etc. George Lakoff and Mark Johnson (1999, pp. 26–30) called these basic-level categories. Among these basic level categories are also concepts that describe social reality, such as family, group, society, marriage, voting, working, discussion, argumentation, etc. According to Johnson and Lakoff, basic-level categories are the source of the most stable knowledge (Lakoff & Johnson, 1999, p. 29).

Anatoly Rakitov expressed basic knowledge well when he claimed that everyday knowledge is about “thing-centric orientation connections” (1978, p. 26). This corresponds well to what Carnap (1980, pp. 30–31) calls the world of things. We commonly accept such truths as “fire burns,” “rocks are hard,” “water boils when it is heated enough,” “the sun warms” and “bread nourishes.” A daily world of experiences makes up most of our worldview. According to Leibniz, “we are all mere empirics in three quarters of what we do” (1898, § 28).

C.I. Lewis thoroughly considered the problem of a shared reality in his book Mind and the World Order (1956). In accordance with a pragmatist approach, Lewis combined common concepts and the common world with the practical activity of people. “Our common understanding and our common world may be, in part, created in response to our need to act together and to comprehend one another” (Lewis, 1956, p. 21). Because a shared reality is a social achievement and the result of coordination, it requires communication between people, shared concepts: “Our common reality reflects our common categories” (Lewis, 1956, p. 115). Common categories are also social constructs. Therefore, C-language and C-reality are intertwined in Lewis’ theory through the action of people.

Wilfrid Sellars (1962) makes a differentiation between a manifest image and a scientific image. A manifest image forms a world that is comprised of objects such as they are discussed in common language. It is a framework within which “man first encountered himself.” Namely, a manifest image includes modern psychology and its discussion on the mind, feelings and intentions. Through them, a person becomes conscious of themselves and of other people. A manifest image is dependent on natural language.

A manifest image does not go beyond the common world of experiences, as is done in science. Science assumes the existence of certain objects in order to explain phenomena. A scientific image is formed by how the theories describe the world. Sellars’ main hypothesis is that a scientific image cannot be constructed without taking the manifest image, and especially its concept of the intentionality of people (the ability to mean something), into account. But the scientific image is nevertheless ontologically most important: Science determines what exists. Sellars is indeed one of the significant defenders of scientific realism.

According to Sellars, reality is primarily composed of what science claims exists. Science has produced a group of claims, such as that the speed of light is constant, that we consider to be universal truths, even though we do not necessarily know their scientific justifications. This is when we trust the opinions of professionals and researchers and use these scientific results in argumentation.
I myself interpret the manifest image to be C-reality expressed through C-language. I mean that C-reality can be described through C-language without having to rely on scientific or religious technical languages. C-reality is a more elementary or certain reality than the scientific image because it is the world in which we live.

In philosophical debates, we often do not notice that despite having disagreements, we have a shared C-reality. A realist might say that the world decides what is true. A relativist might say that our concepts define what the world is. But for everyone, C-reality represents the world in which we live. This, of course, does not exclude the possibility that it can be philosophically justified to, like Sellars, consider the scientific image of the world real and the manifest image unreal.

The reader is justified in asking how these concepts of C-language, C-truth and C-reality that I have adopted go together with relativism. Does relativism not deny the very existence of a shared reality? This is not so, as relativism is more a matter of different interpretations and points of view that concern shared things. In terms of philosophy, C-theory is necessary as a starting point and for enabling discussion. To disagree, we must have something that is common, no matter how hazy. This preunderstanding becomes clearer and changes during communication and with the addition of information. I do not present C-theory as a philosophical truth, but as a very common framework of discussion that can of course be subject to critical examination. For example, C-reality is a sophisticated abstract based on numerous experienced worlds that nonetheless have something in common. Each person has their own point of view towards the world. I think that the reason why assumptions such as the C-theory are not explicitly mentioned is that shared things are commonly viewed as self-evident. C-theory sets philosophers the question of what reality really is and what we can know about it. We have therefore entered the core of philosophy, the question that all classical philosophers, from Plato and Aristotle to Kant and Hegel, have considered, and that is still considered, evidenced by even this book. Relativism does not deny C-reality but emphasises that it can be structured in many alternative ways using different conceptual frameworks.

In this chapter, I have introduced and defined concepts that build equilibrium between subjectivity and objectivity, and relativity and absoluteness. All thinking and knowledge always contain these opposing elements, as Myers (1961) presented. The concepts of C-language, C-truth and C-reality bring a certain stability to a world always in motion and defined through countless points of view. Core rationality builds equilibrium into philosophical discussion, where relativity meets the high standards of argumentation.
Chapter 3
Points of View and Relativism

Abstract This chapter defines the central concept of this book, the point of view. The development of viewpoint relativism is largely based on this concept. A point of view is defined as choosing a certain aspect of its object to represent it. In principle, points of view are subjective and they are anchored to the internal cognitive models of a person. But points of view can also be objectified linguistically and brought out to be publicly examined. Points of view are not permanent, but can be changed and developed, and even exchanged in certain cases. Points of view are not true or untrue as such, but the maps that are acquired through their adoption are more or less true. We can compare objectified points of view, which allows us to avoid the incommensurability often connected with perspectives and conceptual frameworks. As examples of points of view, I will examine Thomas Nagel’s anthropocentric cosmology and Karl Marx’s theory of dialectic contradictions. I define viewpoint relativism as the hypothesis of the viewpoint-dependency of epistemic questions; it is a testable theory. Finally, I will discuss the critique and defence of relativism at the end of the chapter, and reject the claim that relativism cannot be rationally defended.

3.1 The Concept of Points of View

The purpose of this book is to develop and defend the theory of cognitive relativism that I call viewpoint relativism. The concept of points of view is central to it, as we can see in the following basic theses of viewpoint relativism:

1. There is no viewpoint-neutral way to approach reality.
2. Points of view are subjective, but they can be objectified.
3. Each object can be considered from several different points of view.
4. There are no absolute, privileged or universal points of view.
5. Points of view are suited to be improved and changed.
6. Different kinds of criteria can be used to compare points of view.

Thesis 1 denies that there could be completely neutral ways to approach reality. We can never escape our points of view. Thesis 2 brings forth the subjectivity of points of view while allowing them the possibility of being objectified. Thesis 3 highlights
the feature of points of view that they are always limited and that several different points of view are possible. Thesis 4 denies that there could be an absolute and unconditional point of view, such as that of God, that would tell the truth. Also according to this thesis, there is no privileged point of view superior to other points of view, such as that of physics. Furthermore, no point of view can be universal. Points of view are not static and eternal according to thesis 5, but can be developed, deepened, changed and even exchanged. Thesis 6 brings forth the comparability of points of view on the basis of different criteria, such as usefulness.

Each of these theses holds a position on questions that are disagreed upon in philosophy. Thesis 1 rejects realism, thesis 2 subjectivism, thesis 3 monism, thesis 4 absolutism, thesis 5 Platonism, and thesis 6 extreme relativism. All of these questions are discussed in further chapters, where the theses will also be justified.

As with all basic concepts of philosophy, points of view can be understood in many different ways. An extensive discussion has been held on points of view or corresponding concepts such as perspectives, from as early on as ancient philosophy (Heraclitus (535–474 B.C.E.), Parmenides (born ~510 B.C.E.), Protagoras, Plato, Aristotle, etc.) to modern philosophy (ex. Descartes, Leibniz, Spinoza, Kant, Hegel, Nietzsche and José Ortega y Gasset (1883–1995)) (cf. Vázquez & Liz, 2015b). Perspectivity holds a central position in many trends of modern philosophy, such as phenomenology, hermeneutics, post-structuralism and pragmatics. Of the philosophers of the previous century, Ludwig Wittgenstein has perhaps been the clearest representative of perspectivism.

Although the concept of points of view is important for many philosophers, few decent analyses of its nature and its structure are available. I consider Vázquez and Liz’s proposal to be the most comprehensive and interesting. According to them, there are mainly two kinds of points of view; personal points of view, and locational or positional ones (Vázquez & Liz, 2015b). Personal points of view are part of a person’s mental worlds, where beliefs, attitudes and feelings are present. We use such terms as belief, feeling, intuition, memory and view to talk about these. Positional points of view, meanwhile, are opportunities to approach the world in certain ways. For these, we can talk about views, standpoints or approaches. There are points of view of politics or economics, points of view of physics or biology, or points of view of tools of observation.

Positional points of view are “more objective” than personal ones, because a connection to reality can be described without references to a person’s special mental states. For example, a telescope reveals a certain point of view of a target independent of the viewer. Still, the viewer has her own beliefs, and those beliefs affect what she sees (it has been said that the scientists who were looking for canals on the moon “saw” canals there). A positional point of view is a special way to conceptualise the world; it is defined by location and access to the world. The roles of a subject, from which the point of view is defined, are often related to positional points of view. For example, we can recognise the (typical) points of view of a lawyer, teacher or priest.

Liz and Vázquez (2015, pp. 59–62) make an important distinction between subjective and objective points of view. Subjectivity does not come from the person the
point of view belongs to, but from the content of the point of view. The content of a point of view can be subjective in two different ways:

1. **Subjective impregnation from attitudes**: Subjectivity comes from penetrating the content with the subjectivity of attitudes; this is specifically in reference to experiences, qualitative or phenomenal content, observational qualities, etc.

2. **Subjective relativisation to a certain position**: Subjectivity comes from the content reacting or relating to a certain position; this is specifically in reference to a professional and societal position (priest, civil servant) or to linguistic indexicals such as “now,” “in front” and “you.”

A point of view is subjective if its content is subjective in the sense of 1 or 2. If the content of a point of view is not subjective in either sense, it is “objective” or non-personal. **Subjectivism** in this context means the claim that all points of view are necessarily subjective. **Objectivism**, meanwhile, accepts, in principle, the possibility of objective points of view. These definitions are unclear, which is partly due to the difficulty of defining the concept of content.

Liz and Vázquez differentiate yet a third meaning of points of view. When a point of view is complicated and extensive, it can be called a **framework**. Similar concepts are the ones of a conceptual scheme, worldview, paradigm, form of life, etc. Frameworks cannot be primarily identified with personal points of view because they have public content that can often be recognised without directly referring to a person’s beliefs or position. Frameworks are central in the analysis of cognitive relativism.

Some other philosophers have also highlighted the importance of the position for the concept of points of view. According to John Moline (1968), points of view are ways of viewing the world from a certain position. A point of view can be the point of view of one person or one shared by several people, making it intersubjective. Adrian Moore (1997) defines points of view by dealing with position very broadly. Points in space, moments in time, frameworks, historical and cultural contexts, the different roles of people, etc. are all points of view. But then, according to Moore, general views are not points of view unless some perspective is somehow related to them.

The term **perspective** is often used in place of points of view. Steven Lukes (1982) defines perspective as a group of more or less interconnected beliefs, attitudes and assumptions that define how societal reality is understood. These beliefs and assumptions concern suitable fields of observation, explanation, the circumstances of a societal life, the concept of ego, etc.

Characteristic to points of view is that they outline an object in a certain way, and they allocate attention to certain properties. Points of view are partial in that they do not achieve all of the properties of an object. Popper (1966) compares points of view to a searchlight:

> What the searchlight makes visible will depend upon its position, upon our way of directing it, and upon its intensity, colour, etc.; although it will, of course, also depend very largely upon the things illuminated by it. (p. 455)

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Included in the concept of points of view is the idea that the same object can be examined from several points of view. Points of view have two integral characteristics:

1. The point of view chooses, emphasises and outlines its object.
2. The same phenomena can be considered from several points of view.

I am especially interested in situations where a certain phenomenon is considered from several points of view. For example, we can consider a human to be a biological, social or cultural being. We can consider the economy from the point of view of productivity or the allocation of resources. We can consider the environment from the point of view of renewing or utilising resources. It is interesting how these different points of view about the same things react to each other, what is common to them and where they differ.

Vázquez and Liz (2015b, p. 21) present a precise way to define personal points of view. They start from the theory of propositional attitudes. Propositional attitudes are, for example, believing, knowing and doubting. In these attitudes, the subject is in relation to some proposition; for example, Peter believes that inflation will accelerate. Here, the phrase “inflation will accelerate” expresses the proposition that is the object of the belief. The basic idea of their definition is that points of view always include a subject, a group of propositional attitudes and a group of their objects, or propositions. The basic idea is expanded upon from here by adopting the concept of non-conceptual content (cf. Peacocke, 1983). The object of a point of view can be a conceptual content (proposition), but it can also be a non-conceptual content, such as an observable object in its context. The relationship between the subject and the object is not propositional in this case, but rather of some sort of familiarity or contact with the object (Vázquez and Liz, 2015b, pp. 27–31). According to this general definition, a point of view can be directed at beliefs or things outside of the mind. The bearer of the point of view can be something else than just an individual. It can be a community or an abstract entity such as culture or science. For example, we can talk about modern cultural points of view towards ancient sculptures.

Liz and Vázquez (Liz, 2013; Vázquez & Liz, 2011, 2015b) formally define a point of view (PoV) to be a structure

\[
\text{PoV} = \langle B, R, \text{non-CC, CC, Cp} \rangle
\]

where

1. B is a bearer of the PoV, or the possessor, or the titular, of the PoV.
2. R is a set of relations connecting B with the explicit content of the PoV, non-CC and CC.
3. non-CC and CC are the two kinds of content that can be explicitly included in the PoV; respectively, non-CC is a set of non-conceptual content and CC is a set of conceptual content.
4. Cp is a set of possession conditions for having the PoV.
Intuitively, PoV is a system connecting the content to a bearer. Important notions of content (CC and non-CC) and relations R are not specified. A bearer can be a personal subject, or it can be a psychological subject without the status of a person, or it can be a non-personal and non-psychological entity. A PoV could be conceptual (CC) or non-conceptual (non-CC), more or less idiosyncratic, more or less generic in relation to the bearer (B) and personal or non-personal in relation to content (R).

This definition is very common, and it can be used to make many distinctions and define different classes of points of view. However, in terms of the needs of viewpoint relativism, this definition is too complex, and it is difficult to specify it in concrete cases. For this reason, I will define points of view in a much simpler way further on. I still believe that Vázquez and Liz’s definition is a significant theoretical innovation, whose potential they show in the book they published, *Temporal Points of View* (Vázquez & Liz, 2015a).

Liz, Vázquez and their research team studied points of view from the stance of dispositionality (cf. Vázquez & Liz, 2015a, viii). The underlying idea is that the way that the world is revealed from certain points of view is based on the world’s dispositionality. Disposition, after all, means an object’s characteristic way to act or react in a certain way in certain circumstances. A dispositional characteristic is potential, not actual, to use Aristotle’s terminology. We can think that instead of the world structuring itself in a certain way, it has dispositions to be structured in certain ways, depending on which point of view is used.

Vázquez & Liz (2015b, pp. 50–51) assign points of view a very strong ontological status. Points of view are not information or psychological entities, and they cannot be described with physicalistic language. As their hypothesis, they present that points of view are primitive ontological entities (cf. also Vázquez & Liz, 2011, p. 386). We could think of this in terms of points of view about position and access. Using this premise, Colomina-Almiñana (2018) has developed a metaphysical theory about points of view, according to which metaphysical points of view are basic entities that constitute reality.

Metaphysical points of view are objectively real, and as such are part of the stuff of the world. In fact, they constitute the basic structure of the world, and everything else derives from them. Metaphysical points of view then are the ground floor for approaching and accessing the world. Therefore, metaphysical points of view are fundamental. (Colomina-Almiñana, 2018, xiv)

We should differentiate between the epistemological and the ontological (metaphysical) interpretations of points of view. In this differentiation, ontological points of view are the world’s ways to be, and epistemological points of view are ways to know the world. One of the motives of the metaphysical theory is to offer an ontological grounding for epistemological points of view. It could very well be that some dispositional features of reality correspond to points of view, but I myself stress the epistemological nature of points of view: Points of view first and foremost have to do with knowledge and knowing, and they always include the subject who has the point of view. Meanwhile, in the metaphysical theory, “access to the world from a point of view is independent of the bearer and content of such a point of view.”
view” (Colomina-Almiñana, 2018, viii). One of the difficulties in the metaphysical theory is how to identify metaphysical points of view without taking those epistemological points of view that reality is approached from into account. It looks like the metaphysical theory about points of view is a pluralistic metaphysical realism, according to which the world is populated in certain ways independent of people.¹

Tommi Lehtonen has a definition of the concept of the epistemological point of view close to that of Liz and Vázquez, but that he has developed without relying on it. By points of view, he means mental seeing or rational examination. According to Lehtonen (2011, p. 250), there are three kinds of variables in points of view:

**Observer-related variables:**
- The subject (observer, viewer, possessor) or the type of subject
- The interests, aims or values of the subject
- The mental position or attitude of the subject (the “color” of viewing)
- The relevant background knowledge and expectations of the subject
- The social, cultural and historical context of the subject

**Tools-related variables:**
- The conceptual apparatus used by the subject
- The method or approach to viewing
- The basis of viewing or the data

**Object-related variables:**
- The object or focus of a point of view
- The observable features or properties of the object

Therefore, a point of view contains a subject, an object, and the methods of approach that connects them. These factors receive different values and emphases in different situations.

In the 80s, I presented two approaches to points of view. One applies the concept of a possible world (Hautamäki, 1983b, 1983c). The other is based on conceptual space (Hautamäki, 1986). In the article “The Logic of Viewpoints” (1983b), I developed a new modal logic, with two new operators: A for absolute truth and R for relative truth. This logic is useful in dealing with truth relativism and I apply it in Chap. 4. The approach in the book *Points of View and their Logical Analysis* (1986) is quite different and is based on the concept of determinables (see Johnson, 1964). The idea here is that to identify objects, we have to use determinables, which are quality dimensions with several values (say, the quality colour with the values of red, blue, and yellow). Determinables generate a conceptual space where every object has a unique position (its state). In this apparatus, a point of view is defined

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¹ Metaphysical realism, according to Putnam (1981, pp. 49–54), assumes that the world is a certain way independent of the subject. In Colomina-Almiñana’s metaphysics, there are several of these ways.
as a selection of determinables considered to be important. I explain these concepts later in Chap. 6 (see also Hautamäki, 2016).

I combine my earlier definitions and the definitions put forth by Liz and Vázquez and by Lehtonen in my new definition, which focuses on the most common characteristics of points of view. My premise is that a point of view always includes a subject, an object and a certain way in which the subject approaches or interprets the object. Points of view are first and foremost ways to choose interesting characteristics about objects. But what does the point of view choose, and what is the focus targeted at? Of course, a point of view chooses a target or an object at its most basic level, but this is not enough to understand points of view. The partiality included in the concept of points of view is a good place to start. The motivation to discuss points of view comes from the fact that reality is incredibly complicated and includes, from the point of view of humans, an infinite number of different facets, features and appearances. They cannot all be approached at once, so choices have to be made, and that happens by adopting a certain point of view. I call these facets and features and their groups the \textit{aspects} of a phenomenon. The selective function of points of view is specifically about aspects.\footnote{I already presented my idea of an aspect in my research titled \textit{Points of View and their Logical Analysis} (1986). I will develop this idea much further here.}

The definition of epistemic points of view is the following:

A triple $P = \{S,O,A\}$ is called a point of view if and only if $A$ represents $O$ to $S$, where $S$ is a subject, $O$ is an object, and $A$ is an aspect of $O$ of $P$.

We can also say that $P$ is $S$’s point of view (about $O$) or that $S$ is the bearer or possessor of $P$. Condition “$A$ represents $O$ to $S$” can be interpreted in two ways. First, we can emphasise the active role of the subject, where the subject chooses an aspect $A$ to represent or describe $O$. For example, a person can use gender to represent a person. This means that the subject $S$ focuses on a certain aspect $A$ of the object $O$; for example, the aforementioned gender. What the subject $S$ thinks about $O$ and how she interacts with it is dependent on precisely $A$. Representation is a pragmatic process dependent on the subject. On the other hand, the condition allows for a more objective interpretation of points of view. For example, for the subject, a certain observation can represent a physical object. In this case, we can say that the aspect opens \textit{access} to an object.

Points of view are epistemic according to the definition. By “epistemic”, I mean that points of view are related to knowledge acquisition. In fact, they are the precondition of knowledge in the sense that to know, one must possess a point of view. The truth and the justification of statements are dependent on points of view as is shown in Chaps. 4 and 5. By the term \textit{viewpoint theory}, I will refer to the above conception of points of view together with the analysis of the role of points of view in cognition.

An object can be an entity, such as a certain building (a cathedral), or a class of entities, such as the class of humans. But an object can also be more abstract, such \footnote{Represent is an ambiguous verb, but the phrase “act as a substitute for” seems to capture the meaning I’m giving to this verb.}
as a certain topic of discussion. For example, a topic of discussion can be democracy or the question of women’s issues. In a very broad sense, an object could be the world or reality. An object cannot be universally defined because it is defined through the context of speech or cognition.

Through aspect, the subject gives meaning or an interpretation to the object in the sense that the aspect is just that particular facet of the object that the subject is interested in or that the subject has a relationship with. We can also say that the aspect determines the subject’s perspective of the object: The subject views the object from the perspective offered or established by the aspect. Sometimes one cannot even separate aspects and objects, because objects might be given by their aspects.

Graumann (1990, p. 113) presents the following example of points of view. The same house has three different descriptions:

1. This house is ugly.
2. This house is for sale.
3. This house is the oldest one on the street.

If these are assigned as aspects to describe the house, then (1) presents the aesthetic, (2) the economical and (3) the historical point of view (Mattila, 2001).

Aspect is a usefully ambiguous concept. It can mean manifestation, nature, quality, segment, characteristic, expression, interpretation or the way in which one can examine something. The following are essential aspects:

- **Concepts** (for example, the concept of a welfare state can represent the Nordic countries)
- **Characteristics** (for example, hardness can represent steel)
- **Parts** (for example, a discovered piece of bone can represent the dinosaur in determining which period it lived in)
- **The elements of a group** (for example, a crow can represent birds; prototypes)
- **Historical periods** (for example, the Inquisition can represent the Catholic church)
- **The principle of order** (for example, human wellbeing is considered more important than wealth).

From these, I will further analyse the usage of a concept as an aspect. The following characteristics represent this usage:

- **Interpretation**: A concept is an interpretation of the object; an object is so and so. For example, a certain light phenomenon can be interpreted as lightning. The interpretation gives context to the object.
- **Classification**: A concept connects the object to a certain classification of entities where the object shares the typical features of the classification. For example, sparrows are birds.

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4 Aspect comes from the Latin verb *aspicere*, “to look at.”
Differentiation: A concept differentiates the object from other objects. For example, a sports car is different from other cars because of its power and structure.

Metaphors: A metaphor allows us to understand one aspect of a concept in terms of another. For example, ARGUMENT IS WAR brings concepts (e.g. attack and strategy) about war into the understanding of argumentation. (Lakoff & Johnson, 1980).

Aristotelean tradition would say that a concept conveys the nature of an object. I do not approve of this idea in terms of viewpoint relativism. Objects can be represented by different characteristics and concepts in different points of view. “Essentiality” is relative in terms of points of view.5

The arrangement of things and characteristics on the basis of, for example, their level of interestingness or usefulness is common. Arranging is always done from a point of view, it requires the application of some principle of order. Things do not arrange themselves. Arrangement can also be used so that some aspects represent an object better than others. Arrangement is an important point of view for philosophy itself, as well. For example, the justification principles of knowledge claims have been arranged in many orders, as can be seen, for example, from the different ways that the significance of observation have been emphasised.

In terms of relativism, interesting points of view are those where objects are represented with new concepts. In 1967, the first neutron star, later to be called a pulsar, was found. The strong magnetic field of a pulsar sends electromagnetic waves into space. Earlier, it was thought that these were signals sent by an alien civilisation. Presenting new concepts and interpretations is a vital part of research in social sciences. A good example of this is the concept of “postmodernity,” brought into philosophical vocabulary by French philosopher Jean-François Lyotard in his 1979 book La condition postmoderne (The Postmodern Condition, 1984). Another example is “social media,” the usage of which began in the twenty-first century to refer to online interaction and the sharing of data.

Wittgenstein discusses aspects in relation to the famous duck–rabbit figure in Philosophical Investigations (1958a, Chap. XI; see Fig. 3.1). He calls the duckness and the rabbitness the aspects of the figure. That the figure is sometimes seen as the head of a rabbit, and sometimes as that of a duck, Wittgenstein (1958a, Chap. XI) calls the change of aspect. One of Wittgenstein’s examples of aspects is about children’s games. In a game, children begin to call a chest a house. After this, it is interpreted as a house in every detail. According to Wittgenstein, it feels correct to say that they see the chest as a house. We can metaphorically generalise this to say that in the point of view [S,O,A], the subject S sees the object O as A or interprets O to be A.6

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5Essentialism is incompatible with viewpoint relativism. I will further discuss essentialism in Chap. 6 in connection to ontological relativism. What is “essential” is a matter of convention.

6It is interesting to note that reframing in therapeutic conversation involves helping a client to see her situation in a new light, from a new point of view (Mattila, 2001).
Connected to the concept of aspect is the question about the ontological status of objects: Are they the “objective” characteristics of objects that are found, or are they something that are constructed by the subject or assigned to the object? By applying John Searle’s (2007, p. 83) classifications on the basis of ontological status, aspects can be divided into three groups:

1. **Objective (or naturalistic) aspects** that can be discovered without reference to the subject or society (weight, size, acceleration);
2. **Socio-cultural aspects** that can be discovered by referring to societal phenomena such as institutions (laws, money);
3. **Subjective (or psychological) aspects** that can be discovered only through the subject (observations, experiences, memories and emotions).

These ontological types are dependent on the context of the subject, or what the subject connects the object with. I will provide a more concrete example. An archaeologist finds a sharp piece of rock from an excavation and assumes that it has been used as the head of a spear. She does not think the specimen is a rock or throw it away as a useless find. Other research questions arise when it is interpreted as the head of a spear: How did the community make the spears, what did they hunt, who did they fight against, etc.? The aspects of the specimen are, of course, hardness and sharpness, but also, its usage as the head of a spear and a tool for hunting. This is a question of a sociocultural aspect, arising from the research point of view of the archaeologist.

The aspect chosen by the point of view largely determines how objects should be considered and interpreted. If humans are examined as biological creatures, then the theory of evolution and genetics are relevant approaches, for example. On the other hand, if humans are examined as cultural beings, then anthropology, history, linguistics and art history, for example, are in a central position. If humans are examined as spiritual beings, then different religions are important.
It is useful to consider the conditions in which a subject possesses a point of view. The *possession conditions* of a point of view contain time, situation, mental states, motivation, emotion, values, cultural context etc., which have effects on the possession of the point of view (cf. Vázquez & Liz, 2015b). We can ask in which conditions an aspect represents an object to the subject. Possession conditions are effective in comparing and changing points of view.

In a point of view, the object is not just the target of consideration but also the target of action. The subject and object of a point of view can interact with each other, and the concept of the object is created or becomes more precise from exactly this interaction. Which aspect of an object is manifested to the subject depends partially on how the subject acts with the object and the kind of interaction that the subject and object are a part of. This idea about points of view comes very close to phenomenology and is compatible with pragmatism (see Dewey, 1929; Merleau-Ponty, 1992).

The concept of a point of view is pragmatically adapted in the sense that in the point of view $P = [S,O,A]$, the aspect $A$ may specifically arise from the interests, experiences and actions of subject $S$. For example, a person’s point of view of some object in her home may be based on its usage (a heavy glass object is used as a paperweight) or on the memories associated with it (the cabinet is built by Grandfather). It is difficult, if not impossible, for an outsider to determine what the aspect of the point of view is based purely on who the subject is and what the object is. There can also be several different points of view between the subject and the object, as even the duck–rabbit figure demonstrates.

The concept of an aspect must be understood so that not only the “natural” characteristics of entities, but also their sociocultural and subjective characteristics, are aspects. New non-naturalistic characteristics may be assigned to an object in a point of view; for example, the interpretation that a medal means a sign of honour. I call this process an *ontological extension*, borrowing the term that information technology (data retrieval) uses. Aspects are the characteristics of an entity, thing or phenomenon in its ontological extension. We could just as well say that sociocultural and psychological aspects are *augmented reality* in relation to physical reality.

When Colomina-Almiñana (2018) presents that points of view are metaphysically primitive entities, I could accept that this ontological status only applies to objective aspects, not to points of view as such. Suppose that a certain object has the features $F_1, \ldots, F_n$. Each feature might have the potentiality to be selected as an aspect of a point of view. Why call them points of view, although dispositional? A point of view $P = [S,O,F]$ is constituted when a subject $S$ uses $F$ to represent $O$. The possession conditions for $P$ include the existence of $F$; if $F$ does not exist, $P$ is not possible. In this sense, $P$ is “objective”. Keeping points of view dependent on subjects does not lead to extreme relativism as Colomina-Almiñana fears.\(^7\) To avoid conceptual confusion, it is better to consider points of view as abstract constructions, with reference to features that might be objective, but not necessarily. In this

\(^7\)He expressed this fear very strongly in a private communication.
book, I concentrate on the development of an epistemological viewpoint theory, and I will not further continue to discuss this metaphysical theory. However, I do not deny that metaphysical points of view could exist, as Colomina-Almiñana suggests.

Because aspects are the representation of an object, they include many kinds of functions that describe knowing or action. Cognitively, an aspect can be a person’s understanding or belief about an object. It is then also possible that an aspect is an “illusion,” where the subject connects a flawed notion of the object to the object. Meanwhile, in terms of action, the aspect indicates what happens when the object is used for some purpose. The possession conditions for a point of view can be cognitive, pragmatic, or both at the same time. There are many of these kinds of nuances and possibilities, and there is no opportunity to further delve into this here (Cf. Vázquez & Liz, 2015b).

The idea of “seeing” is included in the general concept of points of view. This may lead to a misunderstanding of how I define the concept. Seeing is often considered to be a passive thing, where an external object sends rays of light to the eye, which then processes an image of the object to the mind. The object of the seeing in this model is an external object independent of consciousness. Dewey (1929, p. 26) criticises such an idea and calls it the spectator theory of knowledge. In my own theory, a point of view is an active selective process that is influenced by interests and action. The possession conditions of points of view are pragmatically tuned in to action. The concept of points of view is dynamic; points of view are constructed in a cognitive process (Kaipainen & Hautamäki, 2011, 2017, 2019). Construction does not happen in a vacuum, but as a part of a community and its customs. Despite the deceptiveness of “seeing,” I will still use the term “point of view” because it is used in public discussion in the same metaphorical sense as in viewpoint relativism: There are female points of view,8 economic points of view, political points of view, etc.9

The concept that I present of points of view as a triple [S,O,A] expresses the central theme of points of view: They are a way to examine an object. Of course, other characteristics are related to points of view as well, as Liz and Vázques, and Lehtonen, have presented. When these other elements are taken into consideration, instead of points of view, we can talk about frameworks (cf. Körner, 1974). My definition of framework includes the following epistemic elements:

1. *an epistemic point of view*;
2. *a conceptual system* of basic concepts and categories;
3. *basic beliefs* and background suppositions;
4. *methods* of acquiring beliefs and *criteria of justification* of beliefs.

When I use the term (conceptual) framework, I am referring to this wider context which, in addition to points of view, includes a system of concepts and beliefs and

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8 By “female” I do not mean that a female could not take another point of view. Female refers to discussion about points of view in feminism; see Harding (2015).

9 Sometimes the word “perspective” is associated with points of view as seeing.
the methods of acquiring and the criteria of justifying them. When I talk about points of view, I first and foremost mean epistemic points of view. For example, the basic point of view of the framework of physics could be energy, and the basic concepts could include substance, space, energy, particles, field, interaction, etc. The underlying obligation might be that all observable phenomena is caused by substance and energy or fields. The methods are, for example, particle accelerators, and the criteria or values of assessment could be consistency, simplicity, understandability, etc. When frameworks are discussed, it is often about some community whose members have a shared framework. The concept of frameworks is intersubjective, whereas points of view could be private and subjective.

Reductionism, much discussed in philosophy, is interesting in relation to aspects. In reductionism, some aspect is declared to be the primary aspect, which then determines the other aspects. Most commonly, reductionism is naturalistic or physicalistic, where the natural or physical characteristics are the fundamental aspects that the other aspects are dependent on. For example, a biological structure determines the mental world of humans. Viewpoint relativism denies the existence of a privileged point of view and views reductionism negatively.

Included within relativism is the idea of the construction of objects. I will further discuss this problem in Chap. 6, but in connection to this, we can highlight Lewis’s view that “a thing – is a complex of properties or qualities, recognizable by some uniformity of appearance” (1956, p. 137). Choosing certain characteristics to represent an object classifies it as something specific. There are an endless number of characteristics, so no representation can exhaustively describe a group of characteristics. That which appears as an object comes into existence from a specific reality through interpretation, by connecting itself to certain characteristics. The construction of objects always includes the specified world of experience and observation and our conceptual interpretation of it.

### 3.2 Subjective Points of View and Mental Worlds

Humans live in the world with their own observations, emotions and thoughts. How someone experiences the world and herself is always very unique. We can never perfectly know what another person is experiencing or thinking. We say that the “internal world” of a person is subjective. It is a group of observations, experiences, memories, expectations, personal and cultural interpretations and beliefs unique to the person.

One of the basic theses of this book is that each person has her own point of view of the world. According to cognitive scientist Daniel Dennett (1991, pp. 101–111), where there is consciousness, there is a point of view. Dennett stressed that this is the most basic idea that we have about the human mind. A conscious mind is an observer that receives a limited subset of all information.

A person’s point of view outlines and chooses what she “sees” about the world. This outline affects her beliefs. Although a person’s point of view is genuinely
subjective, it is not arbitrary. A person’s observations and experiences of the world and her actions in society influence what kinds of conceptions the person builds and what kinds of things she believes in. A person acts in the world and learns new things. Some beliefs prove to be wrong, and the person must amend them. An interaction between the external and the internal worlds prevails (Fig. 3.2).

Neuroscientist Antonio Damasio (2010) has studied the formation of consciousness and self. According to him, brains must acquire a new characteristic—subjectivity—in order to become conscious (to gain selfhood). Selfhood then includes subjectivity or perspectivity, which is to say, the relationship between the mind and the world that is characteristic of the self. The mind always has a point of view as to what is happening outside of the mind.

The ability to create images and maps of one’s own body and experienced objects is central for the formation of consciousness and self. Damasio (2010, p. 185) divides the images that form the self into two groups:

1. images describing the objects of consciousness;
2. images describing me.

The self includes the experienced perspective through which objects are described. According to Damasio, perspectivity is the fact that my mind has a point of view to see, to touch, to hear, etc. Slightly simplified, subjectivity can be interpreted to mean that a person’s mind is not a neutral organ whose relationship to the world is shared by all people. Consciousness always includes the sense of self and its unique relationship to the world: “The individual mind… is personal, private and unique to each one of us” (Damasio, 2010, p. 15).

A person experiences and describes herself and the world from her own point of view. A point of view is subjective, which is why her internal world and her conception of the world are also subjective. A significant amount of a person’s internal world is formed of feelings, but also of the images and maps of the surrounding

Fig. 3.2 Points of view affect the consciousness and beliefs of a person
world (including one’s own body). These images and maps form the cognitive content of a person’s mind. According to Damasio (2010, p. 157), consciousness is a state of mind that contains information about the existence of oneself and the environment. Damasio does not go further than this in the analysis of knowledge because his neuroscientific project is to describe the formation and conditions of consciousness, and not to consider the content of consciousness.

Feelings hold a central position in people’s internal worlds (Damasio, 2010, 2018). Feelings are always a part of the human experience, and they partially also affect cognition. People’s moral assessments are an example of this. In his book Ethical Relativity (1960, p. 60), Finnish philosopher Edward Westermarck claimed that people’s moral assessments are based on feelings. However, Westermarck did not deny the share that rational reasoning has in making moral assessments. He did, however, deny that moral assessments could have an objective truth value irrespective of what people hold to be true. By following this train of thought, we could soon see a connection between epistemological and moral relativism. However, I am not able to move on to moral relativism in this book.

The mental models of a person, which refer to a person’s internal world, are often discussed in cognitive science (Gardner, 1987; Lakoff & Johnson, 1999). Damasio (2010), meanwhile, prefers the terms image and map. Mustajoki (2012) uses “mental world” to talk about the models. Mental models and beliefs have a neutral foundation in the brain. The internal world is regulated through brain functions and the senses connected to them. According to Gerald M. Edelman (2006, p. 143), our entire mental lives are based on the structure and dynamics of the brain. It should be noted that Edelman (2006, p. 143) denies strict reductionism, or the reduction of mental states to brain states, even though he considers brain functions to be the foundation of mental function.

A person’s subjectivity is manifested especially in the form of sense qualities, or qualia. An example that is often presented is the sensing of colours: There are no colours in the environment, yet we see objects in the environment as coloured. Of course, they are based on light’s wavelengths, but nothing in the external environment explains how humans see colours. According to Searle (1984), in fact, all mental states are subjective. Only I can feel my pain, and I cannot feel anyone else’s pain. “I see the world from my point of view, and you see it from your point of view” (Searle, 1984, p. 16).

The problematics of perception is a model example of a theme where subjectivity and objectivity meet. Perception has been interpreted in two main ways in relation to the formation of knowledge. Phenomenalism and the so-called sense-datum theory stress the phenomenal nature of perception; we only perceive manifestations, never the objects themselves. According to another position, we directly perceive entities; for example, we see a deer. Therefore, we see objects though our senses, but we do not “see” our senses.

Alva Noë (2004) has tried to find an intermediate position. According to him, the content of perception is two-dimensional. It can alternate between a factual dimension dependent on how things are, and a perspectival dimension dependent on how things seem based on the location (place of perception) of the perceiver.
Location must have a broad definition here: where it is that we see, hear, taste, touch, move, etc. According to Noë, we must accept that perception is not only a way to confront how things are, but how things are in relation to the perceiver. The experience of perception is intrinsically perceiver-centred: (visual) experience is the experiencing of things in some way or another from a certain point of view. The perspectival aspects of the content of perception are only partially determined by how things are. They are also dependent on the perceiver’s relationship to how things are, Noë emphasises (pp. 169–170).

Although a person’s internal world is subjective, people live in the real world, bringing objectivity to the internal world. According to Dewey, the “mind is not a spectator beholding the world from without and finding its highest satisfaction in the joy of self-sufficient contemplation” (1929, pp. 276–277). A conscious subject is inside the world, and consciousness happens by being an active participant of the world. People change their circumstances to better correspond to their own needs, and it is in this change that the world is structured. An acting human being uses her body as the instrument of action: The body is a part of the process of consciousness. This has elements in common with phenomenology and Lakoff and Johnson’s “embodied epistemology” (1999). Living in this world creates one basis for the objectification of points of view.

Dreyfus and Taylor also examined reality and knowledge from phenomenological bases in their book Retriving Realism (2015). They distinguished two epistemological traditions. Descartes started a tradition in which a strict difference is made between the mind and the world, and knowledge is placed in the mind as a representation of the world. A person’s connection to the world is conveyed through representations such as beliefs (propositions). The authors call this tradition “mediational epistemology” (Dreyfus & Taylor, 2015, Chap. 1). In this tradition, truth is the correspondence of the mind’s internal representations with the external reality. A question that is central in mediational epistemology is one of the justification of beliefs, or how we can know that our beliefs are true. The epistemology of analytical philosophy is largely mediational, and this also includes the discussion on relativism.

The authors call another tradition the contact theory, because the basis of knowledge in it is a person’s direct bodily contact with the world (Dreyfus & Taylor, 2015, Chap. 4). Heidegger, Merleau-Ponty and Wittgenstein’s later works have all been influential to this theory. Our beliefs about the world are built on the fundamental “primordial” contact with the world. This kind of contact precedes conceptions and propositions. In this contact theory, it is important that we can understand the world, because we are a part of it and live in it. This (pre)understanding is not conceptual but rather orientational and oriented towards action.

I think that Michael Polanyi’s (1964, 1966) conception of tacit knowledge gives a good context to the contact theory. Knowledge is personal, and what makes it personal is the tacit dimension built into knowing. Tacit knowledge is a skill and an art, an indivisible part of all knowing. Polanyi (1964, p. 55) separated focal awareness from subsidiary awareness. I will present a simple example: when we hammer a nail, our focal awareness is directed at the nail and hitting it with a certain
force. Therefore, we cannot focus on how we hold on to the hammer. Hammering is a simple process in the sense that we can move our focus to the hammer and to handling it when we are not using it to hammer the nail. However, the simplicity of the example cannot hide that there is always a tacit dimension present in all human knowledge, whether it be the usage of language, observations or doing science. For all of these, we need abilities and skills, without which we could not talk about or observe anything. Polanyi considers tacit knowledge to be knowledge, and it is from this sense that we must understand his famous quote: “We can know more than we can tell” (1966, p. 4). Only a portion of our knowledge is explicit knowledge.

Being aware of subsidiary tacit knowledge is not always possible. If we direct our attention to tacit knowledge, we isolate it from its link to the focal target it was being used for. It then loses its purpose as a part of a whole and is excluded from being understood (Polanyi, 1964, pp. 57–58). Still, one can be aware of a part of tacit knowledge, but some part is always left outside of awareness, which affects how far a person’s subjective point of view can be objectified. Explicit knowledge can be communicated to another person. Tacit knowledge is tied to the person. According to Polanyi and Prosch (1975, p. 38), subsidiary knowledge’s relationship to focal knowledge is conceived through the actions of a person; the person integrates the knowledge. Knowledge is not only some kind of intellectual belief or proposition, knowing is always also an ability and a skill. All knowing is personal knowing. Polanyi (1964, x) used the expression “knowing by indwelling” to talk about his conception of personal knowing, and assigned knowing by observing to mean the opposite of this. Polanyi denied that personal knowing would be subjective. However, it is also not objective (Polanyi, 1964, p. 65, 300). What makes personal and subjective different is personal’s commitment to knowledge and truth. I understand this to mean that commitment to knowledge is an attitude where the subject aspires to knowledge and to avoid only subjective opinions. Commitment is “love of truth,” which I earlier called the will to truth.

We have seen that first of all, points of view are subjective. A question of the objectivity of points of view naturally arises when talking about subjective points of view. The subjectivity of points of view means mainly that a subject selects a certain aspect to represent the object under consideration. Because every aspect is just one of many, they are partial. Could we imagine that by taking all points of view into account we can reach an objective point of view? The problem with this proposal is that points of view could give an incompatible picture about reality. Therefore, any “union” of points of view is not possible if the target is to give a coherent map of reality. Of course, there are also compatible points of view, like those of biology and physics. But there are also incompatible points of view, like those behind different interpretations of quantum mechanics. Especially personal points of view are almost always incompatible. If we accept that there are different ways for things to be, then we have to accept that there are different ways to know

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10 I am indebted to an anonymous referee for the recommendation to consider objectivity and the unions of points of view. I will discuss about unions of points of view also in Sect. 5.2.2.
things. The viewpoint theory gives us a pluralistic conception of reality according to which we know the world as far as we have adopted different points of view about it.

But there is another way to look at objectivity, and it is related to invariance. Like Hatcher (2002) points out, what is objective is invariant under changes of points of view. The intuition here is clear: Single points of view are subjective, but that is eliminated by taking many points of view into consideration. The problem with the invariance account of objectivity is that the amount of objective truths/knowledge decreases when the number of points of view increases. I will call such invariant truths “absolute”; they are true from all points of view. Relativism, however, is interested in relative truth: truths that are true from some points of view and false from some other points of view. I will consider these issues in Chaps. 4 and 5.

### 3.3 Points of View Produce Maps of the World

Points of view cannot be considered to be true or untrue in themselves. Points of view are ways to structure reality and highlight certain things about it. Points of view introduce the perspective of awareness, through which reality can be “constructed” and new information can be created. Created or constructed knowledge gains its significance from the point of view, but its truthfulness depends on what the constructed reality is like. Points of view are characterised by partiality; they can only reach some of reality’s aspects. Defining partiality by referring to truth is not very fruitful. It would be better to speak about truthfulness or truthlikeness. This has been done by using the concept of maps.

According to Hatcher (2002, p. 22), points of view are characterised by a person’s inner model of reality. The inner model’s relationship to reality can be described like the relationships between maps and reality (Hatcher, 2002, pp. 25–27). A map can be accurate or inaccurate. A map is accurate if it corresponds to certain features of reality. Then we can say that a map is (partially) adequate. A map can be inaccurate in two ways. If a map does not correspond to certain features of reality, it is inadequate in this respect. If a map contains elements that have no correspondence in reality, it is false.

Our total inner model can thus be true and adequate in some respects and false or inadequate in others. Thus, when applied to our total inner model, the terms true and false are, in this precise sense, relative; we can speak of our inner model as being largely or mostly true or, on the contrary, largely or mostly false. (Hatcher, 2002, pp. 26–27)

For the viewpoint theory, this means that each point of view is partial in the sense that the inner model that it produces is adequate in some respects and inadequate in others. Each point of view always excludes a part of reality outside the range of view, which is why the description enabled by it is partially inaccurate and inadequate. This is why no point of view can provide an exhaustive depiction of reality. These features of points of view are the premises for viewpoint relativism.
Maria Baghramian (2004, Chap. 10.4) took the idea of maps even further than Hatcher. Using the map metaphor, a person is the maker of the map, and conceptual frameworks are the methods and principles of charting the world. The map metaphor brings about many interesting characteristics of cognition (Baghramian, 2004, pp. 314–315), of which I would like to mention the following:

- A map is always a view from somewhere.
- There is no single correct way of constructing or drawing a map.
- Different types of maps serve different purposes and satisfy different needs.
- There are better and worse, more accurate and less accurate maps.
- Map-making is an evolving art.
- There is no such thing as a single absolutely correct map.
- Since maps are drawn for different, sometimes incompatible, purposes, the notion of global convergence (e.g. a map of all maps) does not make sense.

Baghramian also considered the relationship between maps and the truth: “Although it does not make sense to say that a map is made true by the world, it makes sense to say that a map may or may not be true to what it attempts to depict” (2004, p. 315). Using the map metaphor, we can say that each point of view offers a map of the object and social circle of a subject of interest. The adequateness of a map is an essential question. It is not only a thing of belief, we can also test and explain it. The partiality and the other key characteristics of a map lead us to think that the worldview revealed by the point of view is, like the map, partially true or true-like (cf. Niiniluoto, 1987).

One cannot use a map if she cannot place herself in some section of the map or connect the map to some area (cf. van Fraassen, 2008, pp. 80–84). We can see this from maps that have been affixed to certain places, such as permanent city maps. They clearly show where you are. Because of this feature, the map’s ability to represent some area of reality is dependent on its relationship to the user. For X, the map is a map of New York if X knows how to use it to identify places in New York. Van Fraassen emphasises that maps always involve contextuality and indexicality. This matter is central to the justification of the relativity of knowledge involved in viewpoint relativism.

3.4 The Changing and Objectification of Points of View

A person’s internal world is always subjective, composed of their observations, experiences, feelings, thoughts and beliefs. Everyone has a subjective point of view, and no one can step outside of one’s point of view any more than they can step outside of their body. William Hatcher phrases this so that there is no such thing as a completely neutral, viewpoint-independent discussion (2002, p. 43).

How is it possible to understand other people and hold rational discussions from these points of view? The answer is based on the idea that the objectivity required by rationality is not viewpoint-neutrality, but viewpoint-awareness (Hatcher, 2002,
Reasoning is a process through which we become aware of our assumptions about reality. When we become aware of our assumptions, we can present them explicitly through language. Hatcher calls this process of awareness and explication the *objectification of points of view* (2002, pp. 42–46).

Objectification is based on a person’s ability of reflecting on her internal world and personal beliefs; a person is able to set at least some of her beliefs as the target of her reasoning and to rise to a “metalevel.” This is how what Edelman calls a “higher-order consciousness” is created (Edelman, 2006, p. 38). However, higher-order consciousness does not completely disentangle itself from the subjective point of view, but merely distances itself from it. Objectification is also dependent on the possession conditions of points of view: If the conditions are strongly emotional or intuitive, then objectification might be more difficult than in the case of more discursive conditions (like in science).

In objectification, we bring forth our conception of reality. Objectification makes it possible to move from a person’s mental internal world to her intersubjective world. Because we are able to use a common language, objectification makes the presentation of subjective beliefs possible in a verbal form. Because of this, we can address the mental model and point of view of a person and review their content in public discussion. There are also other possibilities for outwardly expressing one’s internal world; for example, by using images and artistic forms of expression (cf. Goodman, 1978).

Starting from the possibility, reflection and language usage of objectification, Hatcher (2002) developed a special philosophical “minimalism,” whose basic premises are the following (2002, p. 15):

1. a significant (non-trivial) portion of human knowledge can be objectified (objectification is possible);
2. the whole of human knowledge cannot be objectified (total objectification is impossible);
3. everything which can be objectified should be objectified (objectification has a positive value);
4. the boundary between the objectifiable and the non-objectifiable cannot itself be objectified (we prove objectification only by accomplishing objectification);
5. valid human knowledge which resists objectification is not irrational but transrational (i.e., compatible with what has been correctly, non-reductionistically objectified);
6. objectification is primarily a means of obtaining clarity, rather than an end in itself.

If we accept the idea of objectification, then these premises do not seem impossible to accept. Premise 2 is partially a result of knowledge’s viewpoint-dependency. Each point of view is restricted, and there is no viewpoint-independent way of knowing. If a boundary could be drawn between the objectifiable and the non-objectifiable, we would have to also objectify the non-objectifiable; premise 4 denies this. In *Tractatus* (1922, § 7), Wittgenstein discussed the same phenomenon when he said that “whereof one cannot speak, thereof one must be silent.”
The fifth premise is based on Hatcher’s Platonism and deism. He even proves the existence of God with a very interesting logical argument based on causality and complexity. Valid non-objectifiable human knowledge must be based on internal conviction and intuition. Many philosophers have appealed to intuition; the most well-known of these, aside from Descartes, is perhaps Henry Bergson.

According to Bergson (1992), knowledge is based on analytic intelligence, which, however, is not quite able to approach the totality of the world. For that, we need a completely different kind of awareness: a holistic intuition based on immediacy. What is interesting in Bergson’s theory is the emphasis on the relativity of science. Science always approaches its subject from a certain point of view, and therefore only leads to partial truths, which science presents with symbols. The symbols break apart the object and emphasise only certain of its aspects. With intuition, which does not use symbols, one can achieve the absolute, according to Bergson. Personally, I view this kind of interpretation of intuition negatively. Intuition is also subjective and viewpoint-dependent. Dreyfus and Taylor’s contact theory, where a person is bodily and functionally in direct contact with the world and receives non-conceptual primordial knowledge through this contact, is much more believable. One could also refer to Polanyi (1964) by saying that tacit knowledge also “resists objectification”: However, it is not transrational, but rather “prerational.”

Although points of view are subjective, or relative to the subject, a person’s mental world also always includes intersubjective, communally shared content. The objectification of points of view and beliefs is a starting point to learning and changing a point of view. People reflect on their beliefs and “test” them based on their own experiences. In communicating, we expose our beliefs to be judged by others, and we give and receive feedback.

Three interconnected sub-processes influence the changing of points of view (Fig. 3.3).11

Reflection Possibly the most important is the self-reflection of one’s own beliefs. In reflection, one is able to set her own beliefs as the subject of consideration and rise to a “metalevel.” A person can test the logic of her thoughts and weigh the durability of her justifications. Reflection can also be called an internal dialogue, in the sense that Vygotsky (1962) presented. However, it is apparent that self-reflection is limited. A person cannot escape her own point of view even at a metalevel. Although, with a good imagination, a person can make a thought experiment of how the world would look from a different point of view. Sometimes reflection can extend to psychological motives and even unconscious desires and fears. However, cognitive neuroscience, psychology and psychoanalysis convincingly demonstrate that reflection has explicit internal boundaries. This is why the reflection process requires an external “voice” that comes from action and communication.

11The triangle of Fig. 3.3 reminds the process of triangulation presented by Davidson (2001). Triangulation is a situation involving “two or more creatures simultaneously in interaction with each other and with the world they share” (p. 128).
Action  We assess the validity of our beliefs in interaction with the surrounding reality. Observations, experiences and actions are included in this process. The world teaches; by acting, we run into things that we previously could not consider, and we gain new observations and experiences. Dreyfus and Taylor’s (2015) contact theory, where the basis of our knowledge is in direct bodily contact with the world, is also related to this. Action as the basis of learning and cognition is also one of the central principles of pragmatism.

Communication  We assess the validity of our beliefs in communication (in a dialogue) with other members of our societies. Included in this process are the objectification of beliefs and critical discussion of their reliability. When taking part in a dialogue, we learn new things and acknowledge the limitations of our point of view. During this critical discussion, some of our beliefs are proven to be shared by other members of our society. These beliefs are objective in an intersubjective way, and viewpoint invariant in a community. They form a common reality: in fact, our shared world.

In regard to improving and changing points of view, there is an objection according to which points of view are not literally changing.\textsuperscript{12} When we learn new things, we just adopt a new point of view. So there are two points of view, the old one and the new one. This objection is similar to the statement that concepts are permanent (or perhaps eternal) and therefore conceptual change means changing

\textsuperscript{12}This objection was presented by Juan Colomina in a private communication.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{fig33.png}
\caption{Sources of changes in points of view}
\end{figure}
concepts (cf. Kuhn, 1982). The difficulty with this kind of thinking is that it keeps points of view (or concepts) as entities that are independent of the mind. But when we consider points of view to be epistemological rather than metaphysical, their change is a real option, because points of view are then human constructs.

The development of one’s own personal point of view is an endless dynamic process. We can always come across things that we have not known and that overturn our earlier beliefs or that lead to new thoughts and new “worlds.” Another reason that the objectification of a point of view is always imperfect is that we are not conscious of all of the parts of our internal mental worlds, signalled also by the conception of tacit knowledge. The usage of language to convey meanings is also an endless process where we attempt to be understood and understand others and transcend subjective meanings. We correct, change and clarify our points of view in this process of action and communication. Although our points of view are subjective, we do not live in a subjective vacuum, but instead are influenced by reality and society. “Settling into dialogue,” to use Kai Alhanen’s term, especially exposes humans to the rich world of points of view.

3.5 The Comparison of Points of View

According to viewpoint relativism, we always examine the world from a certain point of view. One of its central claims is that although no one can transcend their point of view, points of view can still be compared. Comparison cannot be made by removing ourselves from our points of view. Instead, comparison is made within points of view and in the dialogue between them. One can examine her own point of view by reflecting, but reflection cannot be done from a neutral position.

People can at least partially understand the points of view that others come from and imagine themselves in others’ shoes. We can also change our points of view in some cases, as Antti Mattila (2006) described in his book Näkökulman vaihtamisen taito [The Skill of Changing Points of View] (see also Mattila, 2001). A person can have several points of view of various levels, but not a viewpoint-independent position in the world. Some more restricted points of view can be changed, but we may not ever be able to change extensive points of view that are deeply anchored to the persona and history. We need imagination to be able to change our points of view, and it is the reason a person can settle into a new position, so to speak. Imagination is an important component of self-reflection.

People can have points of view of different scopes. Some points of view are very extensive, perhaps even at the level of worldviews, encompassing all of the significant parts of life. Other points of view can be very restricted, encompassing, for example, nutrition or hobbies. Some points of view can be fundamental, based on a person’s cultural background, history and life experiences. They cannot really be given up. Meanwhile, restricted points of view can easily be exchanged or changed, depending on the situation and needs. Our possibility to change our point of view is dependent on the possession conditions of points of view: how strongly we possess
or are involved in our point of view. If the possession conditions are “existential,”
we are fixed to our point of view. On the other hand, if the possession conditions are
more intellectual or rational or based more on curiosity or hypothetical thinking
(what if…), then comparing and changing points of view is easier.

Alasdair MacIntyre’s (2003) analysis of the comparability of different traditions
is relevant in the context of changing and exchanging a point of view. Tradition,
used here, is a very general and encompassing framework. MacIntyre rejects “per-
spectivism,” which he interprets to mean a view according to which each tradition
has their own perspective towards the world and their own criteria to the truth. This
would mean that traditions could not be compared. MacIntyre’s own view is that
although each person lives in their own tradition, we can still learn from other tradi-
tions. Central for this learning is translating the “languages” of traditions to one
another. We can adopt a new native language and use this to settle into another trad-
ition, in a manner of speaking. This learning makes it possible to compare traditions
and possibly to decide that one’s own tradition is inadequate. However, traditions
cannot be changed just like that, as each person has grown up in their own tradition.

MacIntyre rejects the existence of a neutral level of comparison, which would
allow for a person to position herself above traditions. Lehtonen (2014) analysed
MacIntyre’s view on the impossibility of changing traditions and decided that
although whole traditions may possibly not be changed, some of its elements (con-
ceptions, models, criteria) could be changed. Here, he relied on the concept of
points of view that he has presented (Lehtonen, 2011), and emphasised that the ele-
ments to do with the tools and objects of a point of view are easier to change than
the elements to do with the subject.

Without denying how interesting comparability is at a global level, I consider the
local level more relevant in terms of comparing points of view. Frameworks and
points of view are usually local; they have to do with some part of reality or some
object of knowledge. Each point of view is presented in a certain context, where the
object of the point of view is described in a general way where we can discover
which points of view have the same object. Sometimes we can specify points of
view to everyone through a shared common language (C-language). In this case, the
point of view is a point of view of some shared part of C-reality.

I have previously discussed points of view as a general concept. If we approach
them from the concept that I presented of an epistemic point of view, we must focus
on the aspects of points of view. Aspects are primarily characteristics of an object.
They can be compared by finding a context shared by the points of view where the
aspects can be identified or defined. We can assume that if not elsewise, then this
kind of context can at least be found by adopting the C-language as the shared con-
text. The truth criterion cannot be applied to aspects as they are characteristics, not
claims. A point of view affects the beliefs of people, or the “map” of the world, and
their truthfulness can be assessed. But aspects in themselves cannot be compared
using the yardstick of truth, so one aspect cannot be found to be true or truer than
another.

The comparability of points of view means that we can find some criterion, stan-
dard or scale with which we can order aspects. One of the basic assumptions of

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viewpoint relativism is that there is no neutral way to compare aspects and that we cannot say that one aspect is absolutely better than another. The order is dependent on which criterion is chosen. The criteria to do with practice are very interesting in terms of comparability. We can ask if the characteristics brought up by points of view are relevant in terms of the chosen practical objective. If we are interested, for example, in the health of humans, and the point of view is how much people weigh, then the point of view is very relevant in terms of health. Contrarily, if the point of view is the colour of someone’s skin, then the point of view is not very relevant in terms of health.

One might be tempted to think that all points of view are equally good, because there are no neutral criteria to evaluate them. But to evaluate points of view, you have to compare them in some respect, like take their practical consequences into account. So even though there are no neutral criteria, in comparison we must use some criteria for the identification of points of view, and this provides a basis for evaluation.

Nicholas Rescher (2016) has been developing a functional pragmatism that offers a way to examine the goodness of points of view. There are two premises to functionalism (Rescher, 2016, p. 16):

1. Human endeavours generally fall within a particular purpose-geared domain, as for example: diet – the healthful nourishment of the body....
2. The appropriate standard of evaluation and validation for human endeavours is constituted by the efficacy and effectiveness of purpose-realisation within the correlative domain.

Thesis 1 postulates a purposefulness to human action and at the same time localises it to certain domains; for example, diet, healthcare, education, housing, economy and democracy. In the domain of healthcare, the purpose can be securing people’s capacity to function. Different tools are created and used to achieve these purposes, and the usefulness of the tools is then evaluated based on how effective they are in relation to the purposes. Machines and appliances are tools, as are modes of operation, and especially concepts and theories. Thesis 2 conveys the standard of functional efficacy, to use Rescher’s terminology. But it should be noted that this standard always adopts a different form depending on the domain and the kinds of methods used: Efficacy is different in different domains.

According to pragmatism, even forming conceptions is connected to human activity. As C.I. Lewis (1956, p. 140) expressed it, each objective quality includes a functional expectation: If I act in a certain way, specifiable experiences will eventuate. If I taste an apple, it tastes sweet; if I cut it, it is soft. According to Lewis, “the whole content of our knowledge of reality is the truth of such ‘If-then’ propositions” (p. 142). Knowledge is based on activity: “Knowledge is pragmatic and utilitarian” (p. 145).

We can apply the standard of functional efficacy to the assessment of different kinds of points of view. Let us assume that we are interested in the goals of a certain domain, and we use aspect A to represent it. The base question is how relevant in terms of the goals it is that the domain is represented as A. For the sake of the
example, let us assume that a patient has an infection that must be treated. The doctor interprets the infection to be caused by bacteria, and therefore prescribes the patient a course of antibiotics. In this example, the aspect is “caused by bacteria.” Meanwhile, if it were a member of an ancient Inca tribe who had the infection, the shaman might have interpreted the infection to be caused by evil spirits. The treatments following this might include casting spells, exorcism, etc. The aspects are functionally very different. The interpretation of the doctor is based on medical evidence and tested treatments. The interpretation of the shaman is based on the beliefs about reasons for sickness that dominated Incan cultures. The aspects have a very different epistemic status. However, the example cannot be interpreted to mean that the point of view of the shaman is wrong; it is simply very inadequate and problematic when applied to maintaining health by our criteria.

3.6 Cases of Viewpoint Analysis

I have discussed points of view in fairly broad terms in the previous section, and the examples have been fairly simple. To gain depth to the conception of points of view, I will present two philosophically interesting examples. The first is Thomas Nagel’s theory about the human status in the cosmos in his book *Mind and Cosmos* (2012). The second example is Marx’s analysis of the commodity and its complementary opposites in his book *Capital*.

3.6.1 Human-Centric Cosmology

The Darwinist theory of evolution and biology form the basis of how modern science explains humans. Nagel’s (2012) basic thesis is that the problem of human consciousness challenges how we understand the cosmos and its history. The human problem can be condensed into two explainable things from the point of view of the cosmos:

…an ahistorical constitutive account of how certain complex physical systems are also mental, and a historical account of how such systems arose in the universe from its beginnings. (Nagel, 2012, p. 54)

The scientific worldview is saturated by materialism. No fundamentally different kinds of entities exist than material entities. Material entities are subject to the laws of physics, chemistry and biology, and can be explained using these same laws. This standpoint is often called scientific naturalism. Reductionism is one of its central theses; the attempt and possibility to restore mental phenomena to physical phenomena. The mind is explained by appealing to the functionality of the human body, especially the brain. The majority of the scientists of the mind are materialists and reductionists, but there is also an antireductionist school of thought within philosophy, which is what Nagel approaches in his thesis.
In his critique about materialism, Nagel approaches humans as conscious beings, this consciousness being subjective. No explanation of the world that is not able to explain this subjectivity is intelligible. Nagel uses the *human point of view* and its centrality and non-eliminability as his premise. Because materialism demands reductionism, the failure of reductionism requires an alternative to materialism (Nagel, 2012, p. 15). According to Nagel, physical sciences are not able to make believable the appearance of life on earth and the development of life through mutations towards a human with consciousness, reason and morals. In terms of physics, too much chance and too much improbability is involved in these processes.

It is prima facie highly implausible that life as we know it is the result of a sequence of physical accidents together with the mechanism of natural selection. (Nagel, 2012, p. 6)

Nagel’s conclusion is that to explain a phenomenon such as consciousness, we must assume that there are non-physical elements in the environment. “If we stay with the assumption that the mental cannot be reduced to the physical, this will mean that the elementary constituents of which we are composed are not merely physical” (Nagel, 2012, p. 54). This thinking led Nagel to positively or curiously consider neutral monism, according to which the world is fundamentally neutral in terms of mind and matter, or even panpsychism, according to which all the elements of a physical world are also mental.

Nagel’s argument against material reductionism and scientific naturalism leads to a need for a new kind of scientific thinking. We need a new interpretation of the world order, a new “theory of everything.” Nagel questioned the power of causal explanations for explaining consciousness. According to him, teleological arguments are just as believable, if not more so. The emergence of consciousness cannot be explained without assuming that the world developed specifically with the aim to form consciousness. Humans and their consciousness cannot be a random occurrence in the cosmos. Science that is unable to include this in its theories is seriously insufficient or flawed. A scientific worldview must include “natural teleology” alongside causal laws. We must assume that other principles than just the current natural sciences, or laws of physics, more strictly said, affect the environment. Some kind of teleology guides development towards humans.

This natural teleology leads to assumptions that there are different kinds of principles steering the universe: Teleological principles must be placed alongside the laws of physics (Nagel, 2012, p. 67). In terms of the viewpoint theory, we can say that natural order has two aspects: causal and teleological. In order to achieve an intelligible idea and explanation of the world, we must examine it from both the point of view of causal sciences and the point of view of teleology.

In Nagel’s analysis of the *human point of view*, the central assumptions are:

1. Humans are a central part of the cosmos.
2. Humans are physical beings with consciousness.
3. Humans are able to be conscious of the world and to ascertain objective information about it.
4. Humans have a (moral) consciousness of objective values; what is good or bad for them.
Because materialistic and reductionistic natural sciences do not offer an acceptable explanation about humans’ place in the universe from this point of view, there must be other explanations. Especially, the assumptions 3 and 4 are extremely difficult to explain in terms of standard natural science. According to Nagel, the best explanation is that humans are the intended outcome of the development of the cosmos. Nagel’s solution is not the only one. Creationism also has an explanation for humans’ place in the universe: God created humans. One form of this explanation is the theory of the intelligent designer: The complexity and the purpose of life and humans can be explained only by accepting an intelligent designer who has intervened in the evolution process. Nagel (2012, p. 12) rejects theism by making the appeal that an intelligible explanation for humans and their place in the universe must be immanent: Theistic, transcendental explanations appeal to factors outside of the natural order.

The human point of view that Nagel adopted follows the anthropic principle, according to which the universe is how it is because we exist. This is why the universe must have the kinds of characteristics that make the development of life and consciousness possible. The anthropic principle, however, places humans in such a privileged position in the universe that it makes it hard to understand that humans are just one creature among others. Some fairly new philosophical schools of thought such as new materialism and posthumanism see that humans are only one creature among others, one that cannot be prioritised over the rest of nature (Coole & Frost, 2010; Gratton, 2014; Morton, 2010). Additionally, we can justifiably think like John Nolt (2004) does, that the cosmos has existed before us and that it is perfectly possible that we would not have appeared.

However, Nagel’s point of view is fruitful in that it leads to emphasising the complexity of human consciousness and sets the requirement that valid physics (chemistry and biology) must convincingly explain consciousness and its evolution. Current physics and biology are not yet at such a stage. However, the idea that humans are the deliberate target of development is in a league of its own. This approaches creationism, and Nagel clearly has the strong need to reject creationism and defend a unified natural order that includes causal and teleological principles.

3.6.2 Dialectical Contradictions as Complementary Oppositions

Dialectics as discussion among dominating disagreements is a conception that goes back to ancient philosophy. Socrates used dialectics in his philosophical arguments. He approached phenomena from many different points of view, weighing their strengths and weaknesses. By discarding unsound points of view, the right ones remained. Socrates utilised the method of analysis and synthesis, where a phenomenon under discussion was divided into smaller parts and the parts were then recombined to gain new insight on the phenomenon. Both Plato and Aristotle developed
and used dialectics. For them, it was a method of obtaining truth, in contrast with sophists, for whom dialectics was a way to beat the opponent in a discussion. Aristotle considered dialectics to be rhetoric, the skill of discussion with which one’s own view could be made believable and with which to convince the opponent (Kakkuri-Knuuttila, 2014).

In the modern era, especially Kant and Hegel have developed dialectics. In Kant’s theory, the function of transcendental dialectics is to point out those mistakes and antinomies that traditional metaphysics succumbs to in crossing the borders of experience. Dialectics is at the core of Hegel’s philosophy. Reasoning develops through dialectic stages. Each conception of the world is one-sided. When another point of view of a thing is adopted, a completely opposing conception is achieved. By examining these opposites, a new point of view where both earlier points of view are taken under consideration starts to take form. Each stage of development is a partial truth, so the dialectic process continues towards a more multifaceted truth. According to Hegel, the spirit, or the actual reality, was developed in the same way with this thesis-antithesis-synthesis paradigm.13

Karl Marx (1818–1883) adopted dialectic thinking from Hegel. However, according to Marx, history is not a manifestation of the development of the spirit, but the consequence of industrial development (machines and technology). As I have previously demonstrated, for Marx, dialectics was first and foremost a research methodology and the ability to use concepts (Hautamäki, 1980). Characteristic of dialectics are opposites, for which Marx’s analysis of the two-fold character of commodity is a known example (Hautamäki, 1980, 1983c; Marx, 1954, Chap. 1 Commodities).

According to Marx’s labour theory of value, commodity has a use-value and an exchange-value. The use-value of a commodity is its special characteristics that allow it to be used for different purposes. For example, a book can be used for education or for entertainment. Each commodity differs from the other commodities because of its characteristics. Meanwhile, exchange-value is the amount of labour time that goes into the making of each commodity. Exchange-value is presented as the price of the commodity. Commodities can differ in exchange-values only by the amount of labour used to produce them.

Marx’s analysis of the dual character of a commodity as use-value and exchange-value is based on the basic arrangement of exchanging commodities. If 20 yards of linen is worth 1 coat, then different physical objects are given the same value:

\[
20 \text{ yards of linen} = 1 \text{ coat}
\]

This formula illustrates the contradiction of sameness and differentness. From this dual character of commodity, Marx develops the surplus value theory, explains exploitation and deduces capital and the many regularities of capitalism. According to Marx’s Capital, the contradictions of the dual character of

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13 Describing the dialectic method with the thesis-antithesis-synthesis paradigm originates from J.G. Fichte, not from Hegel himself.
commodity are manifested by many contradictions within capitalism. It is not a question of logical contradictions, but of the tensions within phenomena.

In my research (Hautamäki, 1980), I have analysed Marx’s dialectic contradictions and arrived at the opinion that they concern complementary oppositions. A complementary opposition is formed from two depictions, conceptions or theories that

- concern the same phenomenon,
- are dependent on and complement each other and
- exclude and are incompatible with each other.

Dependency and complementation are included because both depiction or theory is necessary in obtaining a general view of the phenomenon. Meanwhile, exclusion means that the depictions cannot be combined without arriving at contradictions. We can see this oppositeness well in the dual character of a commodity as use-value and exchange-value. This oppositeness can also be expressed through the oppositeness of tangible labour (use-value) and abstract labour (exchange-value). Commodity is the identity of opposites.

I have previously defined complementary opposites with the use of the concept of points of view (Hautamäki, 1983c, 1986). The concept of epistemic points of view that I have presented in this book is well-suited for this purpose. In a point of view, an object is examined through the aspect that represents it. I define the complementarity of aspects in the following way:

The aspects A1 and A2 of object (phenomenon) O are complementary if the aspect A1 cannot be studied or understood without the aspect A2, and vice versa, and if A1 and A2 cannot be studied, measured or identified at the same time. If an object has complementary aspects, it has a dual nature.

The concept of complementary aspects is general and is well-suited for other targets as well, such as the analysis of a commodity (Hautamäki, 1983c). The wave-particle duality of quantum physics concerns the fact that electromagnetic waves and particles have both the characteristics of wave motions and particles. This is not compatible with classical physics. Dualism is manifested here as particles that exhibit wave nature and waves that exhibit particle nature. Other examples of dualism include diachronic and synchronic analysis in linguistics (Saussure, 1966), and the difference between continuity and discreteness in basic mathematics (see Kuyk, 1977).

These examples are not yet sufficient in order to show that complementarity is common, let alone to show that all entities have a dual nature. Each category in Hegel’s system includes its opposite and changes into its opposite: Conceptions have a dual nature. Marx’s critique of Hegel is based on the thesis that being is always primary when compared to thinking. Because of this, dialectic categories cannot be made to be a universal logic for being. The problem of the duality of entities is a contingent problem that must be separately solved each time. The nature of the object of research is often revealed only after a long study. But in terms of the viewpoint theory, we can still assume that complementarity is more common than is believed in normal sciences.
3.7 Viewpoint Relativism as a Philosophical Hypothesis

Although there is no firm consensus on how relativism should be characterised, there are still some common conditions that almost all forms of relativism share (Baghramian & Coliva, 2019, Chap. 1). First of all, in relativism, different claims about truth, knowledge, reality, morals, etc. are relativised to some factor external to them, such as the person, culture or framework. This relativisation could be expressed as the dependency supposition: \( x \text{ depends on } y \), where \( x \) is e.g. moral values, beauty, knowledge, taste, or meaning, and \( y \) is e.g. the individual subject, a culture, an era, a language, or a conceptual scheme. Besides this dependency supposition, various forms of relativism also share some other features. Baghramian and Coliva (2019, Chap. 1) list the following:

- **non-absolutism**: rejection of the claim that at least some truths or values are universal and independent of our individual points of view and biases;
- **multiplicity**: the assumption that there is plurality of admissible judgements, values, modes of justification, truth etc. as well as multiplicity of cultural contexts, frameworks of assessment, conceptual schemes, worlds etc. on which the former depend;
- **incompatibility**: according to strong incompatibility one and the same belief or judgement may be true relative to a particular framework (point of view, culture) and false relative a different framework; according to weak incompatibility there may be beliefs or judgements that are true in one framework but not true in another one;
- **equal validity**: different and incompatible viewpoints are equally legitimate or on a par;
- **non-neutrality**: there is no neutral criterion of evaluation for adjusting between the plurality of incompatible frameworks.

*Cognitive relativism* focuses on questions of truth, knowledge, warrant and justification. Most forms of cognitive relativism are *framework relativism*, according to which there are no framework-neutral criteria for adjusting between conflicting beliefs, judgements and truth-claims. *Conceptual relativism* is a form of cognitive relativism where ontology or the world is relativised to frameworks (conceptual schemes, paradigms, language games). According to *global relativism* the truth in any domain and pertaining to any statement is always relative. *Local relativism* claims that the truth and falsity of statements in specific domains are relative to varying frameworks of assessment applicable in those domains. (See Baghramian & Coliva, 2019, Chap. 1). In this book, I develop viewpoint relativism, where different claims about truth, knowledge and reality are relativised to points of view. It is a form of cognitive local framework relativism.

We can clarify the nature of cognitive relativism with the concept of an *epistemic question* (cf. Carter, 2016, x). Epistemic questions are largely about cognition: What is knowledge, what is true, what is justified, what is rational, what is real, etc.? I call an epistemic question *viewpoint-dependent* if in order to answer it, some point of
view or framework must be referenced. An epistemic question is not viewpoint-dependent if there is no need to refer to any point of view to answer the question, or alternatively if the question is invariant under changing points of view. Viewpoint-dependency conveys *pluralism*, opposite of *monism* (or *absolutism*), according to which epistemic questions must be answered with a viewpoint-independent unambiguous either–or answer. In cognitive pluralism, it is accepted that there are several ways of being true, or epistemically justified or rational, etc. (Cf. Coliva & Pedersen, 2017).

Especially relevant epistemic questions to viewpoint relativism are:

- Truth questions: Is the claim X true?
- Justification questions: Is the claim X justified?
- Existence questions: Does the entity/quality X exist?

If these questions are absolute, they can be unambiguously be answered with a “yes” or a “no.” If they are viewpoint-dependent, the answers can have the form:

A. X is true (untrue) [from point of view P].
B. X is justified (not justified) [from point of view P].
C. The entity X exists (does not exist) [from point of view P].

For example, the answer to the question “Does the Sun revolve around the Earth?” might be that from the point of view of science in classical antiquity, the Sun revolves around the Earth. Formulas A, B and C could be expressed as general dependency suppositions: Truth (justification, existence) is dependent on points of view. But this formulation is too general, because I am interested in the scope of X in formulas A, B and C: What kinds of statements are true or justified from points of view, and what kind of entities or qualities exist from points of view?

Epistemic questions can also be formulated at a metalevel, where it is important how the concepts are defined and how they are justified. These metalevel epistemic questions are, for example, what truth, justification or existence mean. The most interesting theories about relativism are indeed meta-epistemological (Carter, 2016; Coliva & Pedersen, 2017). Statements A, B and C can be interpreted as metalevel statements. The statement “X is true” is a first level statement and the statement “X is true [from point of view P]” is a higher level statement. At that level, we can ask on what grounds is X true from point of view P.

For defending relativism, what kind of status we assign to viewpoint relativism as a philosophical theory is important. I find defining *viewpoint relativism* as a hypothesis according to which *viewpoint-dependent epistemic questions exist* to be the most promising approach. It is an authentic *philosophical hypothesis* that can be tested in practice: We can study which epistemic questions are viewpoint-dependent. Note the asymmetry between showing that a question is viewpoint-dependent and showing that it is not. To show that a question is viewpoint-dependent, it is enough to present two points of view, giving different answers to it. But to show that a question is not viewpoint-dependent, one has to prove that it is invariant in relation to *all*

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14 These cases are for exemplifying what typical epistemic questions are, but they do not exhaust the types of epistemic questions.
points of view. Of course, if we restrict the class of “relevant” points of view, it might be possible to prove that in this class the question is not viewpoint-dependent. It is better to see the hypothesis as local, related to certain fields of knowledge and to selected classes of points of view. For example, epistemic questions asked within cultural parameters are often viewpoint-dependent. Meanwhile, viewpoint-dependency is not often recognised in natural sciences, even though points of contention dependent on different frameworks exist there as well. And in mathematics, epistemic questions seem to be clearly not viewpoint-dependent. We can think that viewpoint-dependency is gradual, so that some fields of knowledge (say anthropology) are more viewpoint-sensitive, and others are less viewpoint-sensitive (say physics or mathematics).

We can differentiate viewpoint relativism from global relativism by how epistemic questions are viewed. According to the viewpoint theory, *global relativism* can be defined as a statement according to which all epistemic questions are viewpoint-dependent. This is a formation of Protagoras’ thesis that “everything is relative.” *Local relativism* makes the modest claim that there are viewpoint-dependent epistemic questions in some domains. The hypotheticality of viewpoint relativism can be interpreted to mean that it is local relativism and not tied to global relativism. According to the hypothesis, viewpoint-dependent epistemic questions exist, and they can be restricted to certain areas of knowledge, such as the area of cultural sciences. The question of what epistemic questions are viewpoint-dependent is truly “contingent.” The purpose of this book is to demonstrate that many questions about truth, knowledge and reality are viewpoint-dependent, and therefore to defend viewpoint relativism. Although, I do not give a single and definitive argument for viewpoint relativism, I argue for viewpoint relativism in the context of different forms of epistemological relativism. Viewpoint relativism is adjusted to types of epistemic questions, be they related to truth, justification, existence or science.

### 3.8 Defending Relativism

Finally, I will discuss some of the most common arguments against relativism. Often the debate revolves around whether or not epistemic disputes can be resolved. According to relativism, epistemic disputes cannot always be resolved, because the parties involved are using different standards to weigh their arguments. Meanwhile, relativism’s critics claim that epistemic disputes can be resolved by rising to a higher metalevel where different epistemic systems can be examined from a neutral point of view. For example, in his book *Relativism* (2008, pp. 94–97), Timothy Mosteller claims that in disputes about standards, it is possible to find a neutral

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15 As my discussion partner, I have chosen Mosteller, whose book *Relativism* is specifically anti-relativist, and who wants to “warn us about the ‘anything goes’ attitudes that seem to arise from relativism” (2008, p. 10). Later in Chaps. 4 and 5, I will discuss other critics, especially Paul Boghossian’s critique (cf. Boghossian, 2006b).
A metastandard is neutral if it is not arbitrary and if it does justice to both competing standards. A standard is arbitrary if it is adopted without justifications. If a metastandard sides with another from the beginning, it is not neutral. Mosteller also assumes that the neutral comparison made possible by the metastandard sets one standard above the other, so that one proves to be better justified. He does not consider the possibility that standards at a metalevel could be equally justifiable.

To understand what this debate is about, we should make a differentiation of the different levels of conversation and language. Let us examine a dispute about the statement p = “The Sun revolves around the Earth.” Let us consider that this statement belongs on level 1 of language. When we discuss this level, we move on to a higher level 2. Level 2 could have some ground of justification for statement p, for example, q = “Each day, we see the Sun rise from the East and set in the West.” This ground of justification, seeing the motions of the sun, is not self-evident, so we can move on to level 3 and support the statement r = “From our vast experience, we consider seeing to be a trustworthy ground of justification.” It is only at this level that we approach the question of neutrality. From here, we can further rise to higher levels and consider what grounds of justification actually mean and what logic is used in the justification: s = “Inductive logic is an acceptable logic to use for justification.” We can further move on to higher levels from here and continue this endlessly. This is how the hierarchy of languages and discussions is created:

Level 1. Statements about the world (ex. p)
Level 2. Justification for statements (ex. q)
Level 3. Grounds of justification (ex. r)
Level 4. The logic of grounds of justification (s)
Et cetera.

More generally, this hierarchy can be presented with the metalevels of language:

Level 1. Object language L
Level 2. Metalanguage L1, which discusses language L
Level 3. Meta-metalanguage L2, which discusses metalanguage L1
Et cetera.

The basic question is whether we will at some level arrive at a neutral language or standard where we can resolve the disputes of the lower levels. A logical relativist sets each level in relation to some framework, and therefore the dispute is never resolved. Therefore, there is no such level where relativity ceases and a completely neutral discussion could be achieved.\(^\text{16}\)

This endless series of moving on to higher levels may feel like it would cancel itself out, but infinite series are perfectly acceptable in mathematics and logic.

\(^{16}\) This argument is formatted from sceptic Agrippa’s trilemma of infinite regression, cf. Williams (2001, pp. 61–63).
Therefore, it is not problematic to assume that rising to higher levels can continue infinitely without arriving at neutral criteria (cf. Klein, 2007).

Let us further examine some arguments that are used for and against relativism. According to Mosteller, relativism endures or falls depending on if the absence of neutral standards can be defended or not. True to its nature, philosophy requires philosophical justifications for its own points of view. Mosteller and many other philosophers seize upon this and emphasise that if a relativist wants to defend her doctrines, she must argue for her doctrines by leaning on those principles and criteria that are usually used in philosophical discussion. And by doing that, the relativist must “step outside” of her relativism and use standards that are neutral and accepted by everyone, or that can be debated neutrally. This analysis can be formulated in the following way:

If epistemological relativism is rationally justifiable, there must be some non-relative, neutral framework or ground from which we can make that judgement (Mosteller, 2008, pp. 17–18; Siegel, 1987, p. 4).

At the core of this argument is that rational justification demands a certain kind of neutrality, which is why neutral standards must be accepted in order to justify relativism. However, because relativism was “defined” as a doctrine that denies the existence of neutral standards, defending it breaks its own assumptions and therefore it is more than in trouble.

Mosteller’s argument is reminiscent of the so-called peritrope-argument. It demonstrates that accepting relativism actually leads to absolutism, according to which the truth of some statements is not relative; their truth is independent of what something believes. Let us assume, for the sake of argument, that relativism is true. Then it is true (1) only for relativists or (2) for everyone. If relativism is true only for relativists, it is untrue for absolutists. Then absolutism is true for absolutists. If relativism is true for everyone, it is absolutely true, contrary to the definition of relativism. Both alternatives lead to absolutism being true.

However, disproving relativism is not this easy. The arguments of Mosteller and many other critics are based on their definitions of relativism as a global theory, according to which “everything is relative.” This is extended to argumentation principles by claiming that according to relativism, there are no neutral standards, by which they mean that there are no shared principles or standards. I have my own criteria, and you have yours, and we cannot move on from here. However, relativism as it is presented in this book and in many other new analyses does not, by any means, deny a shared discussion and argumentation within the field of philosophy. Relativism also does not claim that everything is relative. Global relativism is not a particularly interesting theory, unlike local relativism, which has a genuine research question: What epistemological questions are relative?

Conventionally disproving relativism does not disprove local relativism. The local relativist statement that some statements are relative is not self-disproving. On the contrary, if local relativism is true, then strong absolutism, according to which no statement is relative, is disproved. Meanwhile, if local relativism is not true, then absolutism is. Therefore, local relativism and strong absolutism are logically con-
tradictory. But then, this is a common arrangement in disputes. Resolving or not solving differences in opinion is dependent on many factors of different levels, as I demonstrate in Chaps. 5 and 8. Dealing with differences in opinion does not require us to appeal to neutral standards; even noticing the assumptions behind different points of view advances the discussion.

One common criticism about relativism is that it leads to an “anything goes” attitude: All frameworks, opinions and truth-claims are equally good or valid (cf. Boghossian, 2006b). However, major scholars working with relativism reject the thesis of equal validity (cf. Kusch, 2019). Boghossian seems to think that the lack of neutral criteria to choose between different frameworks implies equal validity. However, the problem with this argument is that there is no neutral evaluation. To evaluate something presupposes a base of evaluation: When one states that certain frameworks are equally valid, she is using a measure. Instead, relativism accepts that frameworks or points of view can be compared and ordered, but always relative to some measure or criteria. To say that two items are equally valid or that the other is better presupposes a criterion, and relativism is engaged exactly in that. Local relativism denies the “anything goes” thesis.17

C-language and core rationality are often used in the dispute between relativism and absolutism. These are conditions of a philosophical discussion. However, they are not standards in themselves with which the disputes are resolved. It is essential to compare different arguments, but neutral standards are not necessary for this, contrary to what the critics of relativism assume. Comparison only requires that we have a common enough metalanguage and that we apply the principles of core rationality. These guarantee that different kinds of epistemic systems are not incomensurable, something that would prevent comparison. Of course, the comparison of standards and epistemic systems must lean on some criteria that can be used to weigh the different standards. I myself am inclined to apply “metapragmatic” criteria, according to which the goodness of epistemic systems is weighed by their functionality. Dewey (1920, p. 156) expresses this in the following way:

*If ideas, meanings, conceptions, notions, theories, systems are instrumental to an active reorganization of the given environment, to a removal of some specific trouble and perplexity, then the test of their validity and value lies in accomplishing this work. If they succeed in their office, they are reliable, sound, valid, good, true.*

The “truth” of viewpoint relativism can be seen from its ability to explain and make understandable the viewpoint-dependency of epistemic questions. I am motivated by the belief that viewpoint relativism offers an interesting approach to many philosophical questions—whether or not one accepts it.18

As Unger (1984) argued, there are always certain assumptions and ways to use concepts behind philosophical discussion. Philosophy is authentically relative.

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17 This important issue is discussed further in Sects. 5.3 and 8.1.

18 It is possible to also give relativism the status of a philosophical *stance*, rather than the status of a doctrine that is true or false. This means that relativism is an orientation or perspective with normative consequences (see Sect. 8.1 and Kusch, 2019).
Different philosophical schools of thought use different arguments and methods, so relativism is defended and criticised in different ways in different philosophical traditions. It is also notable that Mosteller’s argument is, common to philosophy, so abstract that there is no clue as to what those neutral standards that he demands could be.

The thought that relativism could be disproved by some abstract argument is insulting to the fact that different versions and targets of relativism are very varied and are based on very different premises. Relativists accept that not everyone can be convinced of the validity of one’s own standpoint. The validity of relativism is relative, as is true of all other philosophical doctrines. However, this does not make argumentation useless or justify anyone to accept any doctrine without justifying it to herself or to her colleagues. Epistemic relativism is one epistemological theory among others, and it can be discussed and compared to other theories within the framework of “normal” philosophical discourse (cf. Coliva & Pedersen, 2017).
Chapter 4
The Relativity of Truth

Abstract In this chapter, I discuss the relativity of truth and define the concept of viewpoint-relative truth. The relativity of truth is perhaps the strongest form of epistemological relativity that can be used to deduce the relativity of knowledge and reality. One of the fundamental problems of epistemology is overcoming doubt, which is why I will introduce epistemology by presenting the problem of scepticism. After this, I discuss different theories of truth. The contextuality, or the dependency on context, of truth is focal to viewpoint relativism, and I build the definition of viewpoint-dependent truth upon it. As an example of relativism that utilises contextuality, I will present MacFarlane’s theory of relativism, which represents the so-called “new relativism.” Finally, I explain what I mean by truth relativism.

4.1 Scepticism and the Possibility of Knowledge

Philosophical discussion cannot progress if we question everything. It is absolutely crucial to philosophy to disprove the radical suspicions of ancient sceptics. If the sceptics are correct, then philosophy and science completely lose their basis. In order to seriously discuss relativism or any philosophical theory at all, we must accept certain common conceptions. In order to suspect things, we must still have something to lean on, as Wittgenstein emphasised in his book *On Certainty* (1958c). This was Descartes’ premise as well in his book, *A Discourse on Method* (2004).

There are similarities and differences between scepticism and relativism. Scepticism questions the possibility of truth, while relativism considers truth possible, but relative. Both scepticism and relativism deny the existence of a universal and an absolute truth. Relativism emphasises that truth can be obtained, but is dependent on context.

Ancient sceptics (Pyrrho, ~360–270 B.C.E. and Sextus Empiricus, ~200–250) wanted to deny the possibility of knowledge. Because we cannot be certain of knowing anything, to achieve peace of mind, humans must have a willing “suspension of judgement” (the state of *epoché*). They formulated different argumentation methods, tropes, to demonstrate the impossibility of knowledge. Many of the sceptics’ arguments are actually arguments for relativism, or they provide reasons for relativism. Sceptics’ tendency to find an equally strong counter-argument for an
argument especially connects scepticism to relativism and pluralism, according to which disagreements about the same subject can be justified.

Scepticism is an ability to set out oppositions among things which appear and are thought of in any way at all, an ability by which, because of the equipollence in the opposed objects and accounts, we come first to suspension of judgement and afterwards to tranquillity.

(Sextus, First book, § 4)

Sextus Empiricus took part in an important debate about the criteria of truth; based on the criteria, one can discover or ascertain the truth. According to him, criteria are primitive truths that must be accepted without proof. These kinds of truths are ones that are based on sense-impressions, preconceptions or feelings. Sextus’ discussion on criteria is still relevant.

In his book *Outlines of Pyrrhonism*, Sextus Empiricus introduces the modes or tropes of Pyrrhonists, which are used to defend the suspension of judgement. One of these is, for example, that the same impressions are not produced by the same objects owing to the differences among animals, human beings, senses, circumstances, dispositions, distances, etc. The mode most important to relativism states that everything is relative: “Since everything is relative, we shall suspend judgement as to what things are independently and in their nature” (Sextus, First book, § 135). Sceptics were actually in favour of two kinds of relativism. In addition to manifestations having a relationship with the observer, entities also always had a relationship with other entities (change, circumstances, dependency, partiality, etc.).

The sceptics’ general argument for refuting knowing takes the following format:

1. Entity E looks like F to person X (Ex. “The tower looks round”).
2. Entity E looks like not-F to person Y.
3. No more than one manifestation (F or not-F) can be true.
4. It cannot be determined which manifestation is true.
5. Therefore, we must doubt statements that claim what E is truly like.

If we consider a person’s subjective beliefs or opinions to be true, we will arrive at Protagoras’ radical relativism. In Plato’s dialogue *Theaetetus*, it is claimed that Protagoras’ view is that “man is a measure of all things, of the existence of things that are and of the non-existence of things that are not” (§ 152a). This thesis can be further understood from Socrates’ phrasing of it, “things are to you as they appear to you, and to me as they appear to me.” Protagoras’ view of the truth is completely subjective: If a person believes p, then p is true to her. This can be reformulated to say that what I believe is true to me. This could be understood in situations that involve subjective observations, such as “I think this apple is sweet.” However, in other situations, it is very unclear what is meant by a concept of truth according to which something is “true to me.” The very quality that truth is independent of the subject is part of the intuitive concept of truth.

I call the following conditional Protagoras’ principle¹ (P):

\[(P) \quad \text{If a person believes } p, \text{ then } [\text{it is true that}] \ p.\]

¹ Protagoras’ principle can be presented in epistemic logic as the formula \((Bp \rightarrow p)\).
In this formula, “p” is a variable that can be replaced with a statement, as in the example:

If Aristotle believes that the Sun revolves around the Earth, then [it is true that] the Sun revolves around the Earth.

Principle (P) leads to an authentic inconsistency, as in the following example.

1. Aristotle believes that the Sun revolves around the Earth.
2. Galileo believes that the Sun does not revolve around the Earth.

According to Protagoras’ principle, it would follow that

1. the Sun revolves around the Earth, and
2. the Sun does not revolve around the Earth.

Socrates rejected Protagoras’ principle due to its inconsistency. Truth must be more than just what people believe or what opinions they hold. If every opinion were true, truth would lose its meaning. An absurd situation arises, where nothing is true any longer: If I believe p and you believe not-p, then p is both true and untrue. The idea that each person has their own truth, or that opinions can be considered truths, is very problematic, and is rejected by rational relativism. However, it is specifically Protagoras’ principle that the critics of relativism often consider to be the prototype of relativism: For example, Niiniluoto (2014) characterises relative truth as meaning that p is true for x if and only if x believes that p. Without going into what “true for X” means, believing is not considered a model for relative truth, at least in viewpoint relativism.

4.2 Theories of Truth

In Chap. 2, I presented the concept of intuitive C-truth, according to which truth is not dependent on a person, but on how things are in reality. Lynch (2005, p. 11) calls this kind of concept of truth objective and considers assuming it a minimal theory of truth. As such, it does not require adopting any specific correspondence relations between language and the world. Starting from this premise, I will discuss the most important theories of truth, which are the correspondence theory, the consensus theory, the coherence theory and the pragmatic theory (cf. Wrenn, 2015). This discussion also provides a background for the treatment of many issues of relativism that are linked to different theories of truth. First of all, the correspondence theory has been used in criticising the relativistic theory of truth, as we will see in Chap. 7. The consensus theory is related to the question of objective knowledge (Chap. 5), and so on.

In order to discuss truth, we must agree on which things can be true. In the philosophy of language, the statement and the corresponding proposition, which consists of the content of the statement, are separated. Propositions are often presented as a that-statement: …that it is raining. What the statement says is the proposition.
Propositions are the subjects of propositional attitudes such as beliefs, and the meanings of claims made in a natural language. Many different statements may express the same proposition, and in that case, they share the same meaning. In older philosophical literature, instead of propositions, it was ideas or thoughts within the mind that were discussed. For example, logician G. Frege considered thought to be the meaning of a statement.

There has been a disagreement in philosophy and logic on whether it is the sentences or the proposition that carries the actual truth. Quine (1990, pp. 77–79) is known for his position that only sentences can be considered to be true, and that a proposition is a vague concept. In any case, I will use the term proposition in my discussion, by which I mean the thoughts or beliefs within the mind that are expressed with sentences and that can be true or untrue. In order to ascertain what the proposition’s sentence expresses, we must interpret the sentence; we must know its meaning.

As I have already suggested, it is useful to differentiate between the concept of truth and the criteria of truth in epistemology. The concept of truth determines what is meant by “truth.” The criteria of truth are the grounds on which truths and non-truths can be separated. The concept of truth does not necessarily provide us with tools to identify truths with. Different theories of truth present different conditions that statements must meet in order to be true. Some of these conditions also provide criteria for truth. These conditions include the consistency of beliefs, practical consequences, agreement with observations, and the agreement of the community.

Differentiating between the concept and the criteria of truth enables us to critically examine different theories of truth. In order to clarify this, in addition to truth, I examine what we consider or see to be true. Related to this is the question of on what grounds can we consider a claim to be true. For example, based on extensive scientific studies, we can consider it to be true that climate change is caused by humans. However, considering a statement to be true does not necessarily mean that it is true.

The different theories of truth can be categorised by which condition, C, they set for the truth. A theory of truth, denoted by T(C), can be presented in the following way.

According to theory T(C), the following claims are applicable to all statements p (or all statements p of a certain kind):

1. if p is true, then p must meet condition C;
2. if p meets condition C, then p is true.

Claim 1 means that condition C is a necessary condition for truth, and claim 2 means that C is a sufficient condition for truth. For example, in the consensus theory, the condition for truth is that the society accepts a claim. The addition of “all statements p of a certain kind” is a reference to the possibility that a truth theory can be limited to only apply to certain statements; for example, mathematical statements or statements that can be empirically tested.

Presenting a theory of truth in the form T(C) encompasses the thought that truth and its condition C are not necessarily coextensive. We can therefore subject theories
of to the test of the intuitive concept of truth. We may ask if it is possible that a statement could be untrue, even if it fulfils the condition C set by the theory T(C), or if some true statement does not actually fulfil condition E. Based on this test, we can see that a theory of truth is not able to set necessary and sufficient criteria for truth for all statements (Lynch, 2005; Wrenn, 2015).

Although a theory of truth does not pass the test of truth, it can still be partially right. For example, a statement that fulfils condition C is probably right. In this case, condition C can be considered a principle of justification: Because a statement fulfils condition C, it has a high probability of being true. According to pluralistic epistemology, there can be several criteria of truth and grounds of justification. Because of this, different theories of truth cannot actually be considered to be exclusive. Each of them articulates some significant point of view of truth and its conditions (Coliva & Pedersen, 2017, Introduction).

The aforementioned test appeals to the intuitive concept of truth. However, some of the theories of truth aim to redefine truth, rather than establish an intuitive theory of truth. In this case, the truthfulness of a statement means that it fulfils condition C of theory T(C):

According to theory T(C): p is true = p fulfils condition C.

Truth is defined here by the condition C. It is not then possible that some statement could be true without fulfilling condition C.

The correspondence theory can be considered the “standard interpretation” of the intuitive theory of truth. Because of this, other theories of truth that present definitions for truth must weigh in on the correspondence theory. It is for this reason that I begin my presentation of different theories of truth with the correspondence theory.

The key idea of the correspondence theory is that what is true is what corresponds to the objective reality, or is objectively true regardless of what we believe or how we justify our beliefs. Reality determines if a belief is true or not. According to the theory, truth is objective, universal and absolute.

The correspondence theory often refers to facts, as we can see from the description Niiniluoto presented:

The truth of statements “consists in their being in the relation of ‘correspondence’ with reality, world, or facts. A popular way of expressing this view is the following: a statement is a description of a ‘possible state of affairs’; it is true that if this state of affairs is ‘actual’ or exists in the ‘real world’, i.e. if it expresses a ‘fact’: otherwise it is false.” (1987, p. 135)

The most common objection to the correspondence theory is that correspondence with a reality independent of us is just empty words. Reality and the world are something that we cannot directly know. The world is not like a picture book that we can use to see what lions, for example, are like. The world, for us, is always communicated to us by language and constructed from concepts. In this sense, there is

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2 The correspondence theory maintains a key position in scientific realism. I will return to it again in Chap. 7, where I will properly discuss scientific realism.
no such thing as an “objective reality” independent of language. This is why the question of truth leads to consideration of the usage of language and the meanings within it.

If we determine a claim to be true because it says things as they “really are,” then, according to Dewey (2006, pp. 342–343), we must ask how they “really” are. He concludes that in order to tell if a claim reflects things as they are, a third medium, where the claim and its target can be surveyed and compared with each other, is necessary, which can then be used to determine if the claim corresponds to reality or not. In this case, a new proposition that could determine its correspondence should be produced. This would lead to an infinite series of propositions.

However, according to the correspondence theory, it is not necessary to know truth, as whether something is true or not is completely independent of humans. For example, the claim that in 150 C.E., 12,318 people lived in Scandinavia is either true or untrue. It is important to remember this, as there is a danger of mixing up the definition of truth with the criteria for truth. This means that the truth of the correspondence theory is not truth for us, but for God or for the world “itself.”

Logician Alfred Tarski (1999) has presented a semantic theory of truth, which in a certain sense specifies the intuitive concept of truth to be correspondence. In this theory, truth is always defined in relation to some specific (formally correct) language L. A truth predicate “true” is defined in metalanguage for the sentences in this language. The metalanguage must have names for the sentences in language L. According to Tarski, a truth definition for language L is materially adequate if it can be used to derive all so-called T-sentences in the following form from it:

\[(T) \ X \text{ is true if and only if } p.\]

X here is a metalingual name for sentence p in the language L. If, for example, p is the sentence “Snow is white,” then the T-sentence expresses the condition

\[(T^*) \ “Snow \ is \ white” \text{ is true if and only if snow is white.}\]

The truth condition of the sentence “Snow is white” is that snow is white. We must note that Tarski did not present T-sentences as a definition of truth, but as the condition that every adequate theory of truth must meet. According to Tarski, his definition of truth is only suitable for languages whose structure is precisely specified and that are not semantically closed. Because natural languages do not meet these conditions, adopting Tarski’s theory of truth as a general philosophical truth theory is not justified.

Tarski’s philosophical aim was to specify Aristotle’s definition of truth, which has been considered a formulation of the correspondence theory. Tarski, however, was not committed to any specific philosophical theory of truth (1999, p. 140).

In fact, the semantic definition of truth implies nothing regarding the conditions under which the sentence like (1)

\[(1) \ snow \ is \ white\]

can be asserted. It implies only that whenever we assert or reject this sentence, we must be ready to assert or reject the correlated sentence (2)

\[(2) \ the \ sentence \ “snow \ is \ white” \ is \ true.\]
Thus, we may accept the semantic conception of truth without giving up any epistemological attitude we may have; we may remain naïve realists, critical realists or idealists, empiricists or metaphysicians – whatever we were before, the semantic conception is completely neutral toward all these issues. Tarski does talk about truth as correspondence and refers to the definition Aristotle presented in metaphysics (discussed in Chap. 2), while considering two other philosophical characteristics of truth (1999, p. 118):

*The truth of a sentence consists in its agreement with (or correspondence to) reality. A sentence is true if it designates an existing state of affairs.*

However, all these formulations can lead to various misunderstandings, for none of them is sufficiently precise and clear… at any rate, none of them can be considered a satisfactory definition of truth.

Tarski’s semantic theory of truth is very significant for the theory and logic of formal languages, but many philosophers have also appealed to it when defending their own epistemological notions. For example, John Searle, who supports the correspondence theory, has argued for the reality of facts and uses them to interpret Tarski’s T-sentences (Searle, 1995, p. 203):

*For any s, s is true iff s corresponds to the fact that p.*

S here is the name of sentence p, and refers to a fact named “p.” According to Searle, facts are the non-linguistic entities that make sentences true. The fact that snow is white is exactly what makes the sentence “Snow is white” true. There are prevailing correspondence relations between the linguistic element, the sentence, and the corresponding non-linguistic element, the fact. The reality of facts means, for example, that they have a causal power that statements do not have.

A Searle-like “fact-metaphysics” would lead us to have to assume that there are countless facts that we do not possess linguistic expressions for, or that we will never believe in. Having a concept of a fact also leads to complicated developments, such as to the concept of negative facts: A rose is *not* red. This kind of concept of a metaphysical fact gets its well-known formulation from Wittgenstein’s *Tractatus*, according to which “the world is the totality of facts, not of things” (§ 1.1).

Quine considers the correspondence theory to be circular (1990, p. 80). This is well illustrated by referring to facts when formulating T-sentences, like Searle did: “Snow is white” is true if and only if it is a fact that snow is white.

The meaning of the sentence “Snow is white” is that snow is white, and the fact that corresponds to the sentence is that snow is white. Two abstract entities, meaning (propositions) and fact, are postulated between two concrete things, the sentence “Snow is white” and white snow. In this postulation, the sentence “Snow is white” acts as the name of both the proposition and the fact. The difficulty of having this discussion is that in correspondence relation, we cannot identify the corresponding fact without using this sentence. In fact, Peter Strawson (1999) concluded from this

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that the relationship between a sentence and a fact is internal. Searle, meanwhile, did not accept this conclusion (1995, pp. 204–216). Quine aptly noted that the need to postulate facts to ontology comes from adopting the correspondence theory. He thought that all facts are unclear entities, and that they should not be assumed: Why should we, in addition to its entities and characteristics, postulate facts into the world (Quine, 1970, pp. 1–2)? The word “fact” need not be used in T-sentences at all, as we can see from the formulation (T∗).

From this, Quine (1990, p. 80) drew an important conclusion that represents disquotationalism: “To ascribe truth to the sentence [snow is white] is to ascribe whiteness to snow; such is the correspondence, in this example. Ascription of truth just cancels the quotation marks. Truth is disquotation.”

The term “fact” can be interpreted in two ways, epistemologically and ontologically:

1. **e-fact** is a statement considered to be true;
2. **o-fact** is a state of affairs or a situation that obtains.

Their relationship is such that the o-fact makes the e-fact true; it is the truth-maker. E-facts are claims, and therefore linguistic entities, while o-facts are metaphysical entities. According to realism, o-facts belong to objective reality, and their existence is not in any way dependent on if we have knowledge of a corresponding e-fact. Relativism questions the ability to speak about objective o-facts that are independent of language. Facts are related to language and what we consider to be true. According to C-truth, a sentence is true if things are as the sentence claims. However, we do not consider all true statements to be facts. E-facts are composed of claims we consider to be certain and that are backed by strong evidence. The credibility of other claims is based on how much they agree with e-facts, or if they can, for example, be derived from e-facts. Scientific knowledge is built exactly on these kinds of e-facts. E-facts are not immune to being overturned, but they are still the most stable core of our knowledge. The concept of an e-fact is relevant for the justification and consensus theories of truth. E-facts, of course, also need justifications, but they can consist of many different things, depending on the area of knowledge (experiences, observations, proof, etc.). The concept of the e-fact can obviously be judged for not being stable in terms of truth; its status as a fact can change, while o-facts are considered to be unchanging. We must note that it is not foundationalism to commit to e-facts, as they are not considered self-evident or unambiguous. The concept of an e-fact is relevant for the concept of knowledge, and I will return to it in the following chapter.

The problems of the correspondence theory, such as the vagueness of the concepts of facts and objective reality, and the difficulty of defining correspondence, have, in part, provided arguments for other approaches. One way is to define truth “epistemologically,” where truth is tied to the justification or even the verification of beliefs (cf. O’Grady, 2002). For example, knowledge is represented in such a way in the justification theory defended by Michael Dummett (2004). In this theory, a sentence is considered to be true only if claiming it is well justified. Stricter versions have also been presented: Only that which can be deductively proven is true, for
example, to be deduced from axioms or verified claims—truth just is verifiability. Pragmatism, which highlights the justification of claims through their practical effects, is a kind of justification theory.

Truth and justification are tied together in the pragmatic theory of truth in such a way that truth can be compared to the final opinion that we arrive at when a study process is continued endlessly. According to Peirce, “truth is that concordance of… [a] statement with the ideal limit towards which endless investigation would tend to bring scientific beliefs” (Haack, 2006, p. 26).

Putnam, who criticised the realistic correspondence theory, also adopted this pragmatic theory, and presented that “truth is an idealization of rational acceptability” (1981, p. 55). We must note that in a later work, Putnam (2015) criticised the pragmatic theory of truth, and moved on to support a realistic “metaphysical” theory.

The basic idea of the pragmatic theory of truth is often presented as the thesis “What is true is what works.” Sometimes pragmatism is interpreted as beneficial thinking and considering useful beliefs to be true. However, the basic idea of pragmatism is the profound thought that knowledge of the world must somehow be based on how the world reacts when we act in it. Knowledge does not describe the world, but is rather an instruction for how to act in order to achieve change in the world. Dewey writes:

The test for ideas, or thinking generally, is found in the consequences of acts to which the ideas lead that is, the new arrangements of things which we brought into existence. (1929, p. 131).

Richard Rorty (1980) considered truth to be that which society considers to be justified in the means available to us. Rorty’s relativism is ethnocentric, because within it, truth is tied to historical societies (Baghramian, 2004, pp. 142–151). This concept is also called the community-oriented account of truth or the consensus theory. Simply said, according to the consensus theory, what is true is what a specific society considers to be justifiably true. Peirce’s pragmatic theory of truth is also a certain kind of consensus theory, as it considers truth to be a concept that all scholars would accept in ideal circumstances where all things are considered.

In the coherence theory of truth, the truthfulness of a belief means its agreement, or coherence, with other beliefs. From a logical point, coherence provides a weak definition of truth. Even if the whole of beliefs were non-contradictory, the beliefs within it could very well be untrue in the sense of the intuitive concept of truth. The problem is also that the requirement for coherence means that the truth of some claims is left unsettled. If the sentence p and its negation not-p do not follow from basic beliefs, then p and not-p are equally consistent with the whole of beliefs. Logically, this situation means that the sentence p is lacking in truth value.

Both the coherence theory and the consensus theory are important aspects of what we consider to be true in our everyday thinking. The coherence theory connects truth to the mutual compatibility of beliefs. This is essential especially when

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4 In fact, Rorty rejected the concept of truth in favour of the concept of justification in community.
the truth of a claim is considered in relation to some theory. The consensus theory, meanwhile, refers to what a certain society (period, culture) considers to be true. We can see the consensus theory well in the so-called consensus conceptions of certain scientific disputes. For example, the climate change reports of the Intergovernmental Panel on Climate Change (IPCC) are such consensus conceptions that are backed by a significant group of distinguished scientists.

It is interesting to ask whether the different theories of truth exclude each other. They are often presented as universal theories in textbooks, applicable to all declarative sentences. But what if they were complementary theories with different areas of application? This is the thought behind truth pluralism, according to which a sentence can be true in many different ways. For example, Lynch (2005, pp. 98–99) presents that the characteristic “to be true” can be realised in many ways while maintaining the proper concept of truth (so-called multiple realisability). According to the stable core of the minimal concept of truth, a true sentence presents things as they are. It is epistemically good to believe true sentences, as they provide a correct view of things.

Douglas Edwards (2018) has proposed a new kind of truth pluralism, stating that there is a distinctive truth-like predicate for different domains of discourse, such as the physical, biological, social, moral, aesthetic, and so on. These predicates determine the way sentences in these respective domains are true or false. In some domains, like in physics and biology, the truth-predicate is a correspondence relation, and in some others, like in moral or social domains, the truth-predicate is related to warranties. This truth pluralism is linked to ontological or metaphysical pluralism, according to which there are multiple ways in which something can have existence or being.

How the concept of truth is fulfilled or realised depends on the area of knowledge. Different theories of truth are suitable for different situations (domains). I present an exercise for what each theory of truth is best-suited for.

• The correspondence theory is best-suited for sentences that concern nature and the physical world: Correspondence is the sentence’s compatibility with a reality independent of us, with nature.
• The justification theory is suitable for mathematical sentences whose truth means their verifiability (provability) within an axiomatic system.
• The consensus theory is suitable for sentences about society: Their truth is based on generally agreed-upon views on, for example, laws and their interpretations.
• The coherence theory is suitable for sentences about scientific theories; their truth or truthfulness is dependent on their compatibility with the theory.
• The pragmatic theory of truth is suitable for technical norms: They are true if following them produces the expected results.

Common to all of these is that the truth tells things as they are. What changes is how the sentences are true. These theories should not be considered to be definitions of truth, but rather presentations for the conditions or criteria of truth. Attempting to pack all of these under the same theory of truth is an injustice to the concept of truth. For example, extending the correspondence theory to encompass society or
mathematics makes the concept of truth artificial. In the newer pluralistic epistemology, the problem of the scope of epistemic concepts, or defining their areas of suitability, is considered to be important. No single theory of truth is broad enough to do justice to all of the applications of the concept of truth (Coliva & Pedersen, 2017; Lynch, 2009).

4.3 The Contextuality of Truth

The relativity of truth is an important question in terms of viewpoint relativism. But what does relativity of truth mean, and how does it manifest? I consider the effect that the context of presenting sentences has on truth to be a good starting point for answering this question. Because we consider propositions (statements) to be the carriers of truth, the key question becomes how the context of presenting a sentence affects the proposition that the sentence expresses. In the semantic theory, the proposition is often presented as the meaning of the sentence. We can ask what the meaning of a sentence is dependent on. One answer is that the meaning is dependent on its truth conditions, by which we mean the conditions under which it is true.

A key question is how context is defined. I follow Searle’s (1981) analysis in calling the claim that the literal meaning of a sentence is independent of context, the theory of absolute meaning. When a sentence is supplied, its literal meaning gives the sentence conditions of truth completely independent of the context of presenting the sentence. This theory does not deny the effect context has on sentences that contain indexicals of context, such as “me” or “today.” We can present the theory of absolute meaning as the formula TAM:

\[ \text{TAM} : \text{sentence} \rightarrow \text{meaning} \rightarrow \text{proposition}. \]

Here, the relationship between the proposition and the sentence is direct in the sense that the context of presenting the sentence is not taken into consideration. Context means the factors that characterise the situation a sentence is presented in, such as the speaker, hearer, time, place, etc. Context also includes the wider context in which the hearer or the listener places the statement in relation to; which discussion one is a part of.

Searle rejected the theory of absolute meaning, presenting that the meaning of a sentence is also dependent on the context and the background assumptions associated with it. According to this theory of relative meaning, the truth conditions of a sentence can change when its context and background assumptions change. The theory also concerns sentences that are generally considered free of context, such as the example sentence popular with philosophers, “A cat is on a mat.” It is easy to imagine situations in which it is unclear if the cat is actually on the mat; for example, in a weightless space on a spaceship, the cat and the mat could both be levitating without the cat physically being on the mat. Context can contain background assumptions that influence the truth conditions of a sentence. A literal interpretation
cannot take contextual background assumptions into consideration. Searle’s theory of relative meaning offers a common starting point for the analysis of the contextuality of truth.

But are there sentences whose truth value is independent of context? Quine (1970, 1990) calls these eternal sentences. They are true or untrue for all eternity, irrespective of the time, place or other context of the presentation of the sentence. One can attempt to modify sentences to be eternal, for example, by adding information to them about time and place: “It was raining in Helsinki on May 16th, 2016, at 8 a.m.” In more complicated instances, it is in no way simple to exhaustively convey the context by adding to the sentence. Eternal sentences are invariable related to the temporal context of sentences. Often, in philosophical discussion about truth, eternal sentences are the norm. People ponder about simple sentences, such as “Snow is white,” that lack a direct indexicality and are about a fairly unproblematic reality based on observation. Logical and mathematical claims are also considered eternal.

Many sentences are openly contextual; their truthfulness must always be determined in relation to the context. Typical examples of this are sentences that contain demonstratives such as “me,” “this,” “there,” or expressions of time such as “today” and “tomorrow.” In language semantics, these expressions are called indexicals, as they are expressed as indexes, such as of time and place. Context determines what these indexicals refer to. The referral relationship must always be shown, as language cannot do it itself. For example, one cannot possibly know the situation of the statement “It was raining yesterday” without specifying the speaker, time and place.

When the context of presenting a statement is taken into consideration, we talk about utterances, rather than “sentences,” in semantics. The meaning of a sentence can only be specified in the situation of an utterance, the context. For example, let us consider a situation where person X says, “That animal is large,” referring to a large rat. The listener can interpret the statement and the adjective “large.” Obviously, a rat is a “small” animal compared to a cat, for example. The background assumption is that the sentence is referring to a small animal in comparison to other small animals. The interpretation can be influenced by other remarks made during the situation. Based on the interpretation, we can decide if the statement “That animal is large” is true or not.

The proposition expressed by the sentence is therefore dependent on the context and its background assumptions. We can use this to make the formula RMT for the relative meaning theory:

\[
\text{RMT : sentence } \rightarrow \text{ utterance } \rightarrow \text{ proposition.}
\]

Following in David Kaplan’s (1989, pp. 500–507) footsteps, we will use the following terms. What the sentence says in a certain context is the content of the sentence. In determining the truth of a sentence, the circumstances of the context of the utterance are taken under consideration. A circumstance is a broad concept, encompassing possible worlds, among other things. Kaplan defines the contextual concept of truth in the following way:
If \( c \) is a context, then an occurrence of \( \phi \) in \( c \) is true iff the content expressed by \( \phi \) in this context is true when evaluated with respect to the circumstance of the context. (1989, p. 522)

To simplify, this means, according to the formula RMT, that an utterance made in a certain context is true if its claim, or proposition, is true in the situation indicated by the context.

In semantics, indexes are also discussed alongside context. Here I follow the presentation of David Lewis (1980). While context is the situation an utterance is presented in, index is a list of those characteristics of the context that must be considered when determining the truth value of an utterance. Context contains a countless number of characteristics, but only some of them are relevant in terms of the truth and understandability of an utterance, and are included in the index. Such characteristics are ones such as time, place and speaker. If a sentence has modal operators such as “possibly” or “necessarily,” then a possible world is included in the index. In order to process such complex sentences with this kind of semantics, we must allow that some of the elements of an index are changeable, while the context stays the same.\(^5\) For example, if a sentence has the expression “yesterday,” then the evaluation of the sentence that is happening today also refers to yesterday, even though yesterday is not part of the whole context of the sentence. In the definition of truth presented by Lewis (1980), truth is defined in relation to the pair \( c[i] \), where \( c \) is context and \( i \) is the relevant index. The index \( i \) can contain many variables, and can therefore be presented as their list \([\text{time, place, speaker...}]\). If the context connects the index unambiguously, then the truth is simply truth in context.

Context can affect the truth of a sentence in two ways. It can change the content of a sentence, as what the sentence states is dependent on the context. Secondly, the context (index) indicates what circumstances are referred to in the sentence. Truth is dependent on the correspondence of the content and the circumstances. Therefore, the content and the reference relationships are relative in terms of context. It is notable that the speaker and the hearer may have a different context or different background assumptions that affect the truth conditions of the utterance.

Accepting the concept of contextual truth is not, of course, philosophical relativism as such, because indexicality (time, place, etc.) can be seen to be an expansion of standard semantics without questioning the concept of an “absolute truth.” By absolute truth, I mean a truth independent of context and points of view.

In Fig. 4.1, the concepts of absolute and contextual truth are compared. On the left, we can see the concept of absolute truth, where the meaning of a sentence and its correspondence with the situation can be seen, and no references to context have to be considered. This relies on the theory of absolute meaning (TAM). On the right is the contextualised concept of truth. The context of an utterance affects its content and the circumstances of evaluation. In absolute truth, the relationship of the proposition to the situation has an external correspondence relation, called denotation in

\(^5\) This is a question of compositionality and the recursive definition of satisfaction, used in Tarskian style semantics.
semantics. In contextual truth, the relationship between the content and the circumstances are internal in the way that both are defined by context. Truth means that the claim of a sentence (its content, proposition) corresponds to the circumstances of the context. However, this correspondence is not the absolute correspondence of the sentence and the world, but rather the correspondence of the world presented by the context and the utterance interpreted in context. The internality presented here does not deny, however, that the circumstances could be realistic. It is a question of which aspects of reality are highlighted.

J. L. Austin (1999) has defined the concept of truth in a way that is compatible with Kaplan’s contextual concept of truth. According to Austin, a statement is made when the speaker utters a certain sentence to the hearers with a reference to a historic situation. A historic situation is a situation described by the sentence, placed within a certain time, place or other context (the speaker, audience, other objects, etc.).

Sentences consist of words, and therefore, in terms of the truthfulness of a sentence, one must understand which entities, characteristics, circumstances, etc. the words are referring to. According to Austin, what they refer to is the “world.” To determine truth, we need two kinds of agreements, conventions (Austin, 1999, p. 152):

- Descriptive conventions correlating the words (= sentences) with the types of situation, thing, event, &c. to be found in the world.
- Demonstrative conventions correlating the words (= statements) with the historic situation &c. to be found in the world.

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6 See Strawson (1999), for criticism of Austin’s theory. Austin’s theory of truth has had a significant impact on the formation of the contextual concept of truth (David Kaplan, David Lewis, etc.).
We can imagine that the descriptive conventions add an “open proposition” to the sentence, expressing the type of the situation. Demonstrative conventions link the indexes of an open proposition (open variables, such as time and speaker) to a concrete situation. Austin defines truth with the use of these conventions (1999, pp. 152–153).

A statement is said to be true when the historic state of affairs to which it is correlated by the demonstrative conventions... is a type with which the sentence used in making it is correlated by the descriptive conventions.

I present a slightly simplified version:

A statement is said to be true if the historic situation is of the type described by the sentence.

Let us examine the statement “There is a desk in front of me, and on it a computer.” This concerns an open proposition, which refers to a situation where there is a speaker, a desk and a computer, and where the desk is in front of the speaker, and the computer is on the desk. The sentence does not give rise to a more complicated situation type. There are an infinite number of such situations. If I make the statement while working on my computer, then it is true at that time and in that place. One cannot talk about the truth value of a statement without attaching who is speaking and what the position the desk is in in relation to the speaker to it.

Austin’s definition of truth brings forth two interesting matters. First, the relationship between words and types of situations is most certainly a question of convention; words do not need, in any way, to be images of entities or events or to reflect them. Second, demonstrative conventions express the contextuality of truth; truth is relative to what situations are found by attaching the time, place, components of the situation, etc. to the utterances.

In fact, Austin’s definition broadens the concept of contextual truth from just including indexical utterances to include all statements. Descriptive and demonstrative conventions concern all statements, regardless of if they have indexical elements, such as words that indicate time, place or the speaker. We return to the question of timeless sentences. If we consider them to express some proposition independent of a statement’s context of use, then it seems as though the truth of statements is absolute: The proposition is true or untrue independent of context. Meanwhile, it follows from the relative meaning theory (RMT) that what (most, or those of a certain type) sentences say is actually contextual, and it is specifically this which makes truth relative. This is the strategy I choose to follow.

7The type roughly responds to what Kaplan (1989, pp. 505–507) calls the character of the expression; for example, the word “I” refers to the speaker.

8For those familiar with logic, Austin’s theory of truth can be clarified in the following way. A language has models according to which the words of a language are interpreted. The interpretation is a question of agreement. Each sentence has a group of models where the sentence is true in terms of logic. If one of these models corresponds to the real situation referred to in the speech, then we can call that sentence true (in the world). I will further discuss this problem in Chap. 7.
4.4 Viewpoint-Relative Truth

One of the central claims of relativism is that the same sentence can be true and untrue when examined from different points of view. In order to clarify this, we must define what truth means in a point of view. The contextuality of truth offers a starting point for defining this. My idea is that points of view are a part of the context that the truth is relation to. We can use this idea to give viewpoint relativism a consistent interpretation, and therefore avoid the paradoxes produced by Protagoras’ principle.

Earlier, I defined points of view to be a triple \( P = [S,O,A] \), where the aspect \( A \) represents the object \( O \) to the subject \( S \). In this definition, it is the aspect that determines how object \( O \) is represented to knowledge. If we make different claims about object \( O \), then their truth value is not only dependent on object \( O \), but also on the chosen aspect. If another person has a different point of view of object \( O \), then different sentences can be true for \( O \).

The concept of viewpoint-relative truth is based on the intuition that sentence \( p \) is true from point of view \( P = [S,O,A] \) if

\[ p \text{ is true of } O \text{ as } A. \]

We can also refer to this as interpretation: \( p \) is true from point of view \( P \) if \( p \) is true of \( O \) interpreted as \( A \). This definition must always be adjusted to the type of the object and aspect. If, for example, \( A \) is a part of \( O \), then \( p \) must be true for this part. If, conversely, \( A \) is a concept that classifies object \( O \), then the truth of \( p \) is dependent on if it applies to \( O \) as an element of class \( A \).

Let us examine a few examples. \( O \) is a wooden cube that has a black side and a red side. We can say that the cube is red if we are talking about its red side (the cube is red when red-sided); but the cube is also black, so one cannot call it a red cube without specifying the side. Let us examine a hospital for its quality of care (point of view \( P_1 \)) and for the cost of care (point of view \( P_2 \)). In terms of quality, the hospital can be efficient, even if it is inefficient in terms of cost. From the point of view \( P_1 \), the hospital does a lot of medical research and widely uses patient data. From the point of view \( P_2 \), we must discuss the hospital’s productivity, capital, profitability, economisation, etc. From these points of view \( P_1 \) and \( P_2 \), the hospital is interpreted as different entities; different aspects are highlighted. The aspect determines which language and the claims made within it is relevant and true of the hospital.

Formally examined, the previous definition is unclear in many different respects. In order to achieve a clear definition, we must utilise the concept of contextual truth, where the point of view is part of the context. In this definition, I apply the logic of points of view that I have developed, where the truth of sentences is set in relation to possible worlds and points of view. In this logic, points of view are in exactly

9 Alternatively, if \( p \) is true of \( O \) \text{ qua } A.

10 I am mimicking Lewis’ (1980) approach here. I developed this definition to clarify the idea of a viewpoint-relative truth in order to respond to the comments Ilkka Niiniluoto made in a private correspondence about the concept of a viewpoint-relative truth.

11 I have presented this definition for propositional logic in Hautamäki (1983b), and for predicate logic in Hautamäki (1986). See also Hautamäki (2016); Hales (1997).
the same position as the possible worlds are in modal logic. In addition to normal modal operators (possibility and necessity), two new operators are introduced: “A” for absoluteness and “R” for relativity. In the model of this logic, there are two two-dimensional accessibility relations, S1 and S2, in the set WxI, where W is a set of possible worlds and I is a set of points of view (or aspects). Relation S1 is an accessibility relation for modal operators and S2 is an accessibility relation for operators A and R. The truth condition for sentence Rp is defined as follows: Rp is true at the point <w,i> iff p is true on some point <w,i*>, which is accessible from the point <w,i>, according to S2.

In applying this logic, I take set I to be a set of aspects. The interpretation of language is always made in relation to possible worlds and aspects, or pairs <w,a>. The object of the point of view here is a possible world; points of view are therefore points of view of the world (or of the situation). We assume that the context c of utterances includes the speaker s, the world w and its aspect a. We mark this context with the symbol c[s,w,a], where [s,w,a] is the viewpoint index of the context. All sentences are evaluated in relation to the context c[s,w,a]. The definition of viewpoint-relative truth (VRT) is:

The sentence p is true [from the point of view of s] in the context c if and only if p is true in the context c[s,w,a] where s is the speaker of c, w is the world of c and a is the aspect of c representing w to s.

The context c[s,w,a] unambiguously assigns the point <w,a>, according to which the truth of sentence p is determined. The semantic rules of the logic of points of view guarantee that all sentences of a language have an unambiguous truth value. Truth is not redefined, but the definition of truth is contextualised so that points of view are attached to the context. The realisation of the condition “p is true in the context c[s,w,a]” is defined by following the conventional semantics or metalogic of modal logic. The truth of condition “a is the aspect of c representing w to s” is viewpoint-independent.12 Some sentences are true and some untrue from the point of view of s, and this is determined by whether the sentences are true or untrue in context c[s,w,a], where a represents w to subject s.

In this approach, semantics is based on two basic concepts: possible worlds and aspects. Instead of aspects, one can speak of points of view (Hautamäki, 1983b) or perspectives (Hales, 1997, 2006), but they are essentially the same thing. As Hales (2006, pp. 99–100) highlighted, assuming perspectives (= aspects) is not any more unusual than assuming possible worlds. If we want a more specific characterisation for aspects, then they could be classifications of worlds, sets of worlds (Hautamäki, 1983b), or metaphysical dispositions (Colomina-Almiñana, 2018).

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12 One way to express this status of a viewpoint-relative concept of truth is to say that what is relatively true on a basic level (in object language, the relativity of the first order) is “absolutely” true on a metalevel. See Carter (2016, pp. 154–155). Nothing can be achieved by setting a truth condition in relation to another point of view, and setting its truth condition to yet a third point of view, etc. (See Chap. 3).
I would still like to determine how the viewpoint-dependent concept of truth responds to Protagoras’ principle (P):

If sentence $p$ is true from point of view $P$, then $p$ is true.

In Protagoras’ principle, the conclusion “$p$ is true” is absolutely accepted without reference to points of view. However, in the definition of VRT, truth is defined in relation to the context $c[s,w,a]$. It is perfectly possible and non-contradictory that $p$ could be true in context $c[s,w,a]$, but untrue in another context $c[s^*,w,a^*]$, which has another speaker $s^*$, who has her own point of view $(a^*)$ of the world. In reference to the narrow interpretation of relativism, it should be emphasised that a person’s beliefs could be false in relation to her point of view: They do not correspond to what is true of an object observed through the aspect.

As an example of this, we will examine a situation that has two points of view of the University of Helsinki. In point of view $P_1$, the aspect is the university as the producer of publications and degrees, and in point of view $P_2$, the aspect is the university’s participation in company cooperation. Let us assume that the following claims are true:

1. “The university is effective” is true [from point of view $P_1$].
2. “The university is effective” is untrue [from point of view $P_2$].

Can it therefore be that the university is and is not effective? We cannot make this claim because the university is effective in a different respect than it is ineffective: The university is effective in relation to publications and degrees, but ineffective in relation to company cooperation. The sentences “The university is effective” and “The university is not effective” do not lead to logical contradictions.

Some sentences are true from many different points of view. Let us examine the sentence $p = “The University of Helsinki was founded in 1640 in Turku.”$ This sentence is not explicitly viewpoint-dependent, and we can believe that it is true from both of the aforementioned points of view $P_1$ and $P_2$. In terms of truth, sentence $p$ is viewpoint-invariant. Viewpoint-invariance does not mean independence from points of view, but an unchangeability when the point of view is changed. Viewpoint-invariance is not a perfect independence from points of view. Viewpoint-invariant sentences are objective in the sense that they are true from all points of view. Of course, viewpoint-invariance depends on the set of points of view considered.

Viewpoint-invariance is a key concept in terms of objective knowledge, as it expresses a shared conception of the truth. If we disagree on everything, then a shared life becomes impossible. A significant number of our beliefs are viewpoint-invariant, as we have a shared C-reality, a shared world of observations and experiences. We also agree on many scientific results and mathematical and logical truths. However, because people often disagree on fundamental things, the concept of objective knowledge must be relativised to points of view as I do in the following chapter.

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13 This sentence can be viewpoint-dependent in a more basic way; for example, it is dependent on how we interpret the concepts of historical knowledge and time.
A concept of truth relativised to points of view helps us understand daily conversation and societal debate. It is blatant in conversation that points of view are not highlighted. It therefore seems as though Protagoras’ principle applies: The same claim is true and untrue. It is central to resolving such viewpoint-dependent conflicts to recognise the different points of view behind the opinions and to make them explicit. A dialogue is a powerful process through which different points of view can meet and we can learn to deal with them, as I demonstrate in Chap. 8.

### 4.5 New Relativism

The contextuality of truth offers a good starting point for developing different forms of relativism. A good example of this is the “new relativism” that John MacFarlane represents, and which he extensively developed in his book *Assessment Sensitivity: Relative Truth and its Applications* (2014). New relativism approaches relativism from the interpretations and usage of language; it is a semantic-pragmatic approach.

Relativism can be interpreted in two different ways in the framework of contextualism, as context can affect the content of sentences (the meaning) or the truth conditions. **Content relativism** emphasises the content’s dependence of context. **Truth-conditions relativism** relates context affects the truth conditions of a sentence, but not necessarily its content. Content relativism is not an interesting form of relativism, as within it, the meanings of sentences change according to context and therefore do not refer to the same proposition. MacFarlane’s truth relativism is indeed truth-condition relativism, and within it, truth conditions or circumstances vary depending on the context. Within these changes of context, it is assumed that the content stays the same.

MacFarlane denies that contextualising truth could be proper relativism, as such. For example, attaching time and place to context does relativise the sentence to the time and place of the truth, but it does not yet make the truth relative. Contextualisation makes it understandable that, for example, the sentence “It is snowing today” is true one day, and untrue another. If a sentence is true relative to a certain time, then it is absolutely true during that time. Just contextualising truth does not, according to MacFarlane (2014, p. 60–64), lead to philosophically interesting relativism. To achieve that, in addition to the context of use, one must include the context of assessment.

The context of use is the context in which an utterance is expressed. Meanwhile, the context of assessment is the context in relation to which the truth is defined. MacFarlane (2014, pp. 64–66) defines an expression to be *assessment-sensitive* if a context of assessment affects its extension (reference). He considers truth-relativism to be the view according to which some sentences or sentence types are assessment-sensitive. New relativism’s aim is to recognise different assessment-sensitive questions or classes of expressions.

MacFarlane uses taste as a typical example of this. For example, Joe says that “Vegetable sandwiches are tasty.” Sasha completely disagrees. The sentence uttered
by Joe is true for him, but untrue for Sasha. The context of use (what Joe says and where he says it) is differentiated from the context of assessment (what Sasha considers to be true) here. The “truth” of the taste-sentence is not determined by Joe’s taste, but Sasha’s, if and when Sasha assesses the truth of Joe’s utterance. The content of the taste-sentence (Joe’s opinion) is the same in both contexts. This arrangement occurs when the speaker and the hearer have different tastes in sandwiches.

MacFarlane’s idea of truth relativism is as follows. A language contains “assessment-sensitive” expressions whose interpretation is perspectival, or changes depending on the perspective of the speaker. These expressions can then be handled by including this kind of a reference of a perspectival expression in the context of the utterance. “Taste” is one such expression, as everyone has a different taste. The truth of a sentence containing the word “taste” therefore depends on whose taste it is that is referred to. The truth of the sentence “Vegetable sandwiches are tasty” depends on if it is Joe’s taste (true) or Sasha’s (untrue) that is in question. In this way, assessment-sensitive expressions become indexicals in a certain way. This can be expressed more technically by making the assessment-sensitive expressions “functions” dependent on the speaker: taste(Joe), taste(Sasha), etc.14

An interesting example is how knowing, or more precisely, the verb “to know,” is treated. Let us imagine that in a philosophy conference, someone asks if anyone knows where Gabriel is. Ilkka says that “Gabriel is in London.” Ilkka bases this claim on the fact that during the week prior, Gabriel had purchased flights to London for the week in question. Paavo replies that he just saw Gabriel in a café. Indeed, Gabriel had cancelled his trip during the weekend, and so had not gone to London, which Ilkka had not known. Based on his own knowledge, Ilkka had good reasonings for his response. However, according to the most current observations presented by Paavo, Ilkka’s reasonings were not adequate for the truthfulness of the belief. In this example, the expression “to know” is assessment-sensitive: The same knowledge sentence has a different truth value according to whose knowledge is in question. The expression “to know” here actually refers to the evidence that the subject has access to in order to justify his knowing. By using the function notation, we arrive at the result that the knowledge claims of Ilkka and Paavo differ in the given context C:

know(Ilkka) ≠ know(Paavo) [in the context C].

“New relativists” have studied many different kinds of assessment-sensitive expressions to do with, for example, beauty, taste, knowing and the future. As an example, let us examine sentences that refer to the future. The sentence “There will be a sea battle tomorrow,” uttered today, is true when assessed tomorrow if there is actually a sea battle tomorrow, but when uttered today, the claim is an uncertain guess. The utterance context here is therefore today, but the assessment context is the following day, tomorrow. The epistemic justifications for assessing a sentence therefore change depending on when the sentence is assessed. This model based on time can

14 This is my own way of clarifying how expressions can be assessment-sensitive.
also be used for the analysis of changing opinions. One often hears that if someone had known earlier what they do now, they would not have said or done as they did. Hence, a sentence $p$ is impossible to defend in the current assessment context, even if it was defendable in an earlier context. Based on this, a person can (or would like to) retract her earlier opinion.

In his basic definitions, MacFarlane leans on Kaplan’s (1989), and especially Lewis’ (1980), concepts and techniques. All of these examples share the same logical structure: Truth is determined in relation to two contexts, of which the other is the use context of the sentence, and the other the differing assessment context. The use context assigns the content to the sentence, and the assessment context gives value to an assessment-sensitive expression. We can specify this structure by utilising Kaplan’s context-dependent definition of truth, setting it in relation to two contexts: the use context $c$ and the assessment context $c^\ast$. We will mark the reference of the assessment-sensitive expression $F$ (“taste,” “to know,” etc.) with an $f$, which can change from one context to another. Using Lewis’ notation, $c[f]$ is a context where $f$ belongs to the index. Let us assume that the sentence $p$ under examination includes $F$. The definition of assessment-sensitive truth, used by MacFarlane (2014, p. 67), can be presented in the following way:

A sentence $p$ is true as used in the context $c$ and assessed from the context $c^\ast$ iff $p$ is true in the context $c[f^\ast]$.

Essential in this definition is that the reference of the assessment-sensitive expression $F$ is dependent on context, which the speaker or the assessor is included in. Truth is defined in context $c[f^\ast]$, which has the same elements as $c$ except that the value of $F$ is taken from the assessment-context $c^\ast$. For example, in the context $c[taste]$, the taste is the speaker’s, and in the context $c^\ast[taste^\ast]$, the taste is the assessor’s, and the truth is defined in a “hybrid” context $c[taste^\ast]$ ($c$ without $\ast$). In other assessment-sensitive cases (“to know,” “beautiful,” etc.), the values of an expression (knowledge standards or aesthetic standards) change accordingly.

In order to evaluate “new relativism,” we must understand why MacFarlane is not satisfied with the “regular” contextual conception of truth that I discussed in the previous section. His aim is to create a theory that can be used to easily deal with disagreements. If we follow the regular contextuality, we can only have one kind of relativism, where “knowing” is in relation to who is speaking. MacFarlane (2014) calls this view nonindexical contextualism. The same utterance in two different contexts does not necessarily mean the same thing; they are different propositions, and they cannot be in disagreement. However, according to MacFarlane, the differences in opinion about knowing (or taste, etc.) are caused by the speakers’ differences in justifications or standards of knowing (or differences in taste). This problem can be solved, according to MacFarlane, by differentiating between the use context and the assessment context of a sentence, as can be seen in the previous examples. The use context then determines which proposition is in question, while the use of the assessment context makes it possible to assess it in different “epistemic circumstances.” Only this kind of an assessment-relative approach leads to a philosophically interesting relativism, according to MacFarlane.
Central to MacFarlane’s theory is the claim that the use context is not sufficient or suitable for defining the relative truth of a sentence because truth is “absolute” in a use context. A separate context of assessment is needed from which the proposition is evaluated.

According to truth-value relativism, there is no absolute fact of the matter about whether a proposition, as used at a particular context, is true; it can be true as assessed from one context and false as assessed from another. (MacFarlane, 2014, p. 73).

The contextual index holds a crucial position in this approach, as the values of an assessment-sensitive expression are acquired specifically through the index. This is why MacFarlane rejects nonindexical contextualism. The use context does not unambiguously connect the extensions (knowing, taste, time, etc.) of an assessment-sensitive expression. There can be an infinite amount of these assessment contexts. If the use context were sufficient in determining truth, then we would be dealing with an “absolute truth” (MacFarlane, 2014, p. 67).

The basic arrangement of the disagreements that MacFarlane presents is such where person A assesses the truth of a claim p made by another person B with her own criteria (taste, to know). The criteria that B uses are irrelevant, and they cannot/should not be used in assessing the truth of sentence p, instead using the assessor’s criteria. Because there can be an infinite amount of assessment criteria (persons A), the claim p does not have a fixed truth value. We can use logical language to describe this arrangement in a way that the assessment-sensitive expression is a free variable whose value is not assigned by the use context. Instead, the assessor can give the variable her own value.

MacFarlane’s approach uses two basic assumptions: (1) language has assessment-sensitive expressions, and (2) their values can be varied in the use context without changing the content of the statements that contain these expressions. Assumption (1) is a hypothesis that new relativism has been able to present evidence for. However, no one has been able to present general criteria of characterising assessment-sensitivity.15 The danger here is an ad hoc type of argumentation.

Assumption (2) is not self-evident: Using our own criteria (taste, knowledge, etc.) in a completely different kind of historical or cultural context does not do justice to the original claim. We may ask if the new hybrid context c[f+] built in the assessment is natural or functional. For example, processing the truth of the beliefs of ancient philosophers with our truth criteria is anachronism. Or, for example, if Ms. W says that the way Mr. M is behaving is sexual harassment, it feels problematic to suggest that M’s criteria determine the truth of this claim, and that W’s opinion is not the “real” truth. Of course, the assumption here is that harassment is an assessment-sensitive expression.

How the expression “to know” has been dealt with has received the most attention, as it has to do with central problems of epistemology. MacFarlane’s way of tying knowledge to the assessor is problematic. According to Carter (2016, p. 164),

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15 When, in the spring of 2018 in Berkeley, I asked MacFarlane if the class (or characteristics) of assessment-sensitive expressions could be defined, he responded to it doubtfully.
an assessment-sensitive view of knowledge is incompatible with a very fundamen-
tal epistemic anti-individualism: “The thesis that what converts true belief to knowl-
edge can supervene partly on element of one’s local and/or modal environment.”
One can ask if the concept of knowledge that MacFarlane used in his analysis cor-
responds to the established concept of knowledge within philosophy. The question
can also be reversed: If the assessment-criteria provide a correct analysis of the
concept of knowledge, then is the analysis of the concept of knowledge provided by
epistemologists relevant at all? Carter (2016, pp. 230–231) calls this the existential
challenge of epistemology. I agree with Carter in that even a “regular” Kaplan-
Lewis type contextualism provides a basis for defining interesting forms of
relativism.

In regular contextualism, the truth of a sentence is dependent specifically on the
context. This can descend into relativism by stating that the same sentence can be
true in one context and untrue in another. I agree with MacFarlane in the sense that
content relativism is not an interesting form of relativism, as within it, a sentence
makes different claims in different contexts. However, truth condition relativism
based on points of view is an interesting form of relativism. If we include points of
view as indexes in semantics, as I have done in my definition of viewpoint-relative
truth VRT, where truth is assessed in relation to the context c[s,w,a], then I see no
benefit in MacFarlane’s assessment-sensitive approach. Why could we not simply
say that vegetable sandwiches are tasty to Joe, but not to Sasha? We do not need to
have a stance on which one is correct, as MacFarlane is interested in doing. Actually,
MacFarlane dilutes relativism by making the assessment context the truth context:
The disagreement between the speaker and the assessor is solved in favour of the
assessor. A true relativist would say that we cannot solve which one is right, as they
have different points of view (or tastes, etc.).

4.6 Truth Relativism

Maria Baghramian defines truth relativism as the claim that “the truth or falsity of
judgements or beliefs cannot obtain independently of the context or background in
which these judgements are made” (2004, p. 128). Truth relativism rejects the con-
cept of an “objective truth,” according to which truth only depends on what the
world is like as it is. An important criterion in defining truth relativism is whether
the theory allows for making mistakes. The difference between truth and beliefs
disappears in subjectivism, according to which truth is always truth “to me”;
truth is different for different people. As previously mentioned, even Plato rejected this kind
of Protagorean subjective concept of truth.

More plausible, moderate forms of truth relativism correlate truth with frame-
works, conceptual systems, paradigms, schemes, theories or other constructs that
are socially shared or known, and in that sense objective. An example of this is
Hilary Putnam’s (1981) internal realism, which I will analyse in Chap. 6.
Truth relativism can be given interpretations of different weights. The supporters of a global relativism claim that all truth claims are relative. According to moderate truth relativism, the truth of some sentences is relative, but not necessarily of all sentences. In this case, the question of which sentences are absolute, and which are relative, is genuinely an open question.

In the previous chapter, I defined viewpoint relativism as the hypothesis that viewpoint-dependent epistemic questions exist. Here, we consider questions of truth in the form, 

Is the sentence p true?

If, in order to answer this question, one must refer to a point of view, then the truth of sentence p is viewpoint-dependent. The answer is also dependent on what the sentence p is like. Viewpoint relativism aims to be open to these questions without finalising its positions in advance. Based on this, viewpoint relativism supports moderate truth relativism and assumes that language contains sentences whose truth is viewpoint-dependent. This hypothesis does not require that the speaker of the language is conscious of using the point of view. The truth of a viewpoint-dependent sentence cannot, in principle, be determined without considering points of view.

It is a genuinely “empirical” or contingent question how broad the group of viewpoint-dependent expressions is. A relativist is inclined to assume that a significant amount of our knowledge is relatively true, and that we must take points of view into consideration in order to understand the nature of human knowledge. One way to approach this hypothesis is to follow MacFarlane’s account of assessment-sensitive expressions. It seems that most, if not all, assessment-sensitive expressions are also viewpoint-sensitive: knowing, taste, time, values etc. Many adjectives are also apt to viewpoint-dependence. A simple example of this is the adjective “big”: what big is, is clearly dependent on what is being compared. Secondary qualities of senses, such as “hot” or “red,” are also viewpoint-sensitive (hot for whom?). These are very elementary and tentative observations, however. In any case, even these examples show that language has viewpoint-dependent expressions, and this speaks in favour of viewpoint relativism.

Another interesting approach is to follow Wittgenstein’s theory of language use. We can assume that a language has different ways of using sentences “absolutely” and “relatively.” If a sentence is used absolutely, then it is not presented from any point of view. If it is used relatively, then the relevant point of view is presented explicitly or assumed to be known through context. The connection between the point of view and the language-game is also interesting, and I will return to this issue in the following chapter. Ultimately there are several of these approaches, and following and sorting through all of them more thoroughly would require its own research project.

I have previously presented a viewpoint-relative concept of truth, where the truth of statements is dependent on the context they are presented in or that they appear
This dependency can be related to the meaning or the truth conditions of the sentences. Using Kaplan’s terms, it is a question of differentiating between content and circumstances. Boghossian (2006a, b) has responded very sceptically to the relativisation of both meaning and truth conditions. According to him, the “regular” meaning of propositions should not be changed into a relativised meaning, where a framework or another element referring to context is attached to the meaning: “It would be wrong to construe the discovery of relativism about a given domain as the discovery that the characteristic sentences of that domain express unexpectedly relational propositions” (Boghossian, 2006a). Boghossian is then in favour of the theory of absolute meaning, and rejects both content relativism and truth-conditions relativism. At the heart of this critique is the claim that replacing or completing the condition “sentence p is true (or justified)” with the condition “sentence p is true (or justified) in framework F” is not acceptable.

Although I cannot delve into the specifics of Boghossian’s critique,16 I must note that in his argument, completion happens at the same level as the sentence that is being completed. It then looks like sentence “p” is in reality the sentence “p in framework F.” There are always obvious problems associated with such replacements. A completed sentence behaves in a different way in a language than a non-completed sentence does. For example, if someone believes the claim “Vegetables are healthy,” one cannot possibly conclude from this that she believes the claim “Vegetables are healthy in the framework of nutritional science.”

As Martin Kusch (2009) argues, the framework enters the picture in the metalevel. The relative concept of truth is defined by considering the framework in semantics. Thus, a first-level statement is not replaced with another first-level statement that would mention framework F. In the viewpoint-relative definition of truth that I present, the point of view or the framework is a part of the context of the valuation of a statement. Semantics is always at a metalevel compared to the statement under assessment. The fundamental question becomes whether the statement examined is viewpoint-relative (or assessment-sensitive) or not: If it is, then the point of view or framework is included in the context.

Relativism is the antithesis of absolutism. Absolutism can be interpreted in two ways: (1) it denies the relevance of points of view for determining truth, or (2) it claims that all true sentences are true from all points of view. The first interpretation can be read as according to absolutism, questions of truth are not viewpoint-dependent. The second interpretation accepts viewpoint-dependency on a general level, but does not consider it to have an impact, because true sentences are true independent of points of view.

I will clarify the relations of truth relativism and absolutism by applying the logic of points of view. In this logic, points of view exist, and all statements are evaluated in relation to points of view. The concept of relative and absolute truth can be easily defined in this framework.

16 For criticism of Boghossian, see Kusch (2009, 2017a, 2017b); Carter (2017).
• A statement is **absolute** if it is true from all points of view or untrue from all points of view (its truth value is constant);
• A statement is **relative** if it is true from one point of view but untrue from another point of view.

According to **absolutism**, all statements are absolute.\(^\text{17}\) In the framework of the logic of points of view, there is no special reason to align with absolutism. It would be the same as if we were to consider all statements in modal logic to be “necessary.” **Strong relativism**, meanwhile, assumes that every statement is relative, that is, true from some point of view, and untrue from another point of view. This corresponds to Protagoras’ thesis that “everything is relative.” Using the logic of points of view, Steven Hales (1997) convincingly proved that strong relativism is not a sustainable theory.\(^\text{18}\) Even that all logical truths are absolutely true in this logic disproves strong relativism.

When we dismiss absolutism and strong truth relativism, the remaining option is **moderate relativism**, according to which there are relative statements that are true from one point of view and untrue from another point of view. Moderate relativism is incompatible with absolutism.\(^\text{19}\) Even though strong relativism is an unsustainable view, moderate relativism is defendable and has interesting consequences. Especially valid is that **everything true is relatively true** or **everything true is true from some point of view**. Hales (2006, pp. 102–103) considers this to be the basic thesis of moderate relativism. It is in no way a strong claim, but describes moderate relativism well. It is analogous to the truth of modal logic that everything true is possible. The basic thesis can be freely interpreted to mean that behind every truth there is a (hidden) point of view. We should still note that moderate relativism is a consistent theory that does not disprove itself, like strong relativism does. Strong relativism has to recognise that it is a relative theory in itself.

In the framework of the logic of points of view, **viewpoint-dependency** means relativity, that a statement can be true from one point of view and untrue from another point of view. Truth relativism based on points of view is therefore the hypothesis that relative statements exist. In terms of truth relativism, the key question is which statements are absolute, and which are relative. If the class of the viewpoint-dependent statements cannot be determined, then the argumentation might rest on separate examples. Thus far, no such class has been presented.

One approach to the question of relative statements is based on the thesis **everything true is true from some point of view**. If there were a systematic method to generate the possible point of view behind each statement, then we could classify

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\(^{17}\) Absolutism means that for all sentences $p$ the formula $(A p \lor A \neg p)$ is true. Strong relativism means that for all sentences $p$ the formula $(R p \land R \neg p)$ is true.

\(^{18}\) This argument is based on the idea that if the formula $R A p$ (relatively absolutely $p$) is true, then the formula $A p$ (absolutely $p$) is also true, contrary to the assumption of strong relativism. More precisely, the formula $(R A p \rightarrow A p)$ in the S5 version of viewpoint logic is valid.

\(^{19}\) Moderate relativism is the view that sentences $p$ for which the formula $(R p \land R \neg p)$ is true exist. Its negation is the formula $(A p \lor A \neg p)$ that characterises absolutism.
statements according to their points of view: this is true from that point of view, etc. Mauri Kaipainen and I have developed a formal method—an algorithm that can be used to find the perspectives behind the classifications of data. This method is based on multidimensional conceptual spaces. I will describe this approach in section 6.4. (See Gärdenfors, 2000; Kaipainen & Hautamäki, 2011, 2015, 2017, 2019; Hautamäki, 2016).

A heuristic technique in looking for relative sentences could be to simply test statements for whether their truth value changes when one or several points of view are brought out. We can subject a sentence p to a test of point of view:

If the sentence p is true, is it true from every point of view P?

If p passes the test, then p is viewpoint-independent and therefore absolute. If it does not pass the test, then p is viewpoint-dependent and relative. This test also leads to finding hidden points of view that are often unnoticed.

In terms of the viewpoint theory, one could think that absolutism could be defended by assuming that there is an “absolute point of view” from which the world could be seen in the most, if not perfectly, “neutral” way possible, considering all factors. God’s point of view is metaphorically referenced with the thought that God perfectly knows what the world is like. And what God knows is truth. According to realism’s absolute theory of truth, the world is a certain way in itself, and what is true is what corresponds to the world as it is. Each unambiguous statement is either true or untrue according to realism, and what decides that is a correspondence with a reality independent of humans. There is no room for points of view in this model.

A philosopher inclined towards the absolute concept of truth may not be satisfied with determining truth with the help of points of view. According to her, each sentence is true or untrue “absolutely” without referring to points of view: She supports absolutism in the sense of denying the relevance of points of view in determining truth. One could then think that we are talking about what Quine calls eternal statements: They “stay forever true, or forever false, independently of any special circumstances under which they happen to be uttered or written” (1970, p. 13). All eternal statements are compatible with each other. In the case of contradictory statements, an absolutist asks which one of them is truly true. This is such a natural question that it should be further explored.

Let us examine the statement “Someone will reach the moon.” In the middle of the last century, it was possibly considered certain that someone will not reach the moon, considering the level of physics and technology of the time. However, someone did reach the moon, as early as in 1969. Most people will readily say that we now know for sure that someone will reach the moon. This implies that someone reaching the moon is independent of points of view, and absolute truth.

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20 Compare with the statement Wittgenstein considered, “Someone has been on the moon” (Wittgenstein 1958c, § 108, § 111).
A moderate relativist, however, maintains the thesis that what is true is true from some point of view. God’s point of view is not really true for us. Which authentic points of view could be connected with the claim that someone will reach the moon? Observations and experiences to do with C-reality are the basic point of view. We saw Armstrong land on the surface of the moon, we heard his words “That’s one small step for man, one giant leap for mankind.” There were several observations made of this event, giving the statement “Someone will reach the moon” a strong justification. In lieu of a better term, we can refer to a C-viewpoint (common sense point of view) in this case.

Moderate truth relativism does not deny the existence of absolute statements. Such statements can be those of mathematics and logic. Many ordinary statements, such as “Water boils at 100 degrees Celsius,” also seem to be viewpoint-independent. We could also consider them to be viewpoint-dependent, as they are associated with a C-viewpoint. My own conjecture is that in terms of truth, there are a considerable number of viewpoint-dependent statements, especially when considering that many statements that appear to be “absolute” turn out to be relative after further analysis.

The C-viewpoint is robust in the sense that it is anchored directly to the sense organs, observations and memory. It provides us with a C-reality, which we intuitively consider the actual reality, even if according to science it is actually a question of a “manifest image,” as was stated in Chap. 2. If some point of view contradicts with the C-viewpoint, we would rather maintain the C-viewpoint than the point of view contradicting it. The C-viewpoint is not perceived as a point of view. Wittgenstein aptly says that “the aspects of things that are most important for us are hidden because of their simplicity and familiarity” (1958a, § 129). I interpret this to mean that those aspects that the daily point of view is fastened on are so self-evident that their perspectivity is not noticed.

In searching for an absolute truth, people also often refer the neutrality and objectivity of science. But is science viewpoint-free? Even behind the most exact natural science are certain choices and aspects that are studied, but that are not considered to be aspects (cf. Kellert et al., 2006). Science is perspectival, from its observations to its theories, as Giere (2006) presented. Dreyfus and Taylor (2015, pp. 151–154) also discussed the “point of view” of science, by which they mean a point of view that reveals which entities are within themselves; it is “the view from nowhere.” Characteristic of this view is to emphasise the causal characteristics of entities. For example, gold is an element with the atomic number 79. Many other characteristics can be deduced from this, such as its melting point and its shininess. Causality and measurability characterise the point of view of science. This point of view is “useful” in many ways, as it makes, for example, the development and application of technology possible. Other aspects of gold were significant for other groups, such as for ancient Egyptians. Dreyfus and Taylor (2015, pp. 151–154) reject essentialism, which also concerns natural sciences. Gold does not have an absolute nature, even if its scientific “nature” could be expressed as element 79.
In accepting the “no-viewpoint” of natural sciences, Dreyfus and Taylor are inconsistent and in contradiction with the pluralism they accept. Even in natural sciences, there are several points of view and competing approaches that give very different interpretations of the same phenomena (see Kuhn, 1970). Natural sciences are not viewpoint-independent. They examine reality from their own point of view, but this point of view is as “objective” as the scientific method allows (repeated tests, precise measurement, statistical correlations, causality, open publishing, criticizing, etc.). It is specifically the scientific method that tries to eliminate the subjectivity of points of view, that they represent the point of view of one or several people. Of course, this does not mean that the same phenomenon could not be examined from other relevant points of view as well.

The reflection above of the possible viewpoint-dependency of science is hypothetical. We can assume that there are identifiable points of view behind many scientific theories; still, it is not easy to prove that this is the case for all theories. Viewpoint relativism is a hypothesis that does not deny the existence of viewpoint-independent truths in science. Such truths could be the ones in mathematics and logic, but also those natural laws that are established and have been repeatedly tested.

In defending relativism, there is a danger of inventing points of view even in cases where there is no need or no evidence for a point of view. They might be called artificial points of view. On the other hand, in many cases there are hidden points of view. C-viewpoint is one of them. Viewpoint blindness is the inability to recognise hidden points of view. In the debate on viewpoint relativism, one has to avoid the Skylla of artificial points of view and Kharybdis of viewpoint blindness. The danger of Skylla is to have too many points of view and the danger of Kharybdis is to have too few points of view.

In the basic thesis of viewpoint relativism, I have denied the existence of absolute and privileged points of view. Points of view are always finite and limited, and we are unable to consider all of the aspects of phenomena at the same time. From this perspective, we have points of view of different degrees and scopes. As science progresses, we are able to supplement points of view and to adopt new ones, and the further we progress, the closer to an “absolute” truth we get. I examined this situation in my study Points of View and Their Logical Analysis (1986). We can extend the idea of points of view to use it to define an absolute truth as a limit of widening and combining points of view. Although, the more we consider points of view, the more unlikely it is that they can be connected, especially as many points of view are interest-bound, and interests cannot always be reconciled. Still, this process can be used to weed out subjectivity. The viewpoint theory leads to a mosaic, pluralistic conception of reality: We always have many simultaneous truths that are acquired from different points of view. Of course, they do not have the same value, so their “colours” and “places” change in the mosaic.
Abstract  The three central themes of epistemological relativism are the relativity of truth, knowledge and reality. In the previous chapter, I demonstrated how the relativity of truth could be given a well-founded formulation by setting truth claims in relation to context and points of view—without renouncing the concept of an objective truth. In this chapter, I will examine the relativity of knowledge in regard to justifying it. The traditional theory of knowledge is individualistic, while viewpoint relativism leads to communal epistemology, where knowing is always in relation to a community. I will begin my analysis from the classical concept of knowledge, which can be considered the basic definition for the concept of objective knowledge. By problematising it, we can arrive at such a definition of objective knowledge that is compatible with viewpoint relativism. It is incompatible with the realistic interpretation of knowledge. I will discuss pluralism related to justifying knowledge, and this will lead me to epistemological relativism, where epistemic systems are viewpoint-dependent. An example of this is the dispute over the heliocentric model (does the Earth revolve around the Sun, or vice versa?). This case leads us to the question of the incommensurability of frameworks; it is argued that incommensurability does not concern local frameworks. At the end of the chapter, I will consider whether Wittgenstein could be considered an epistemic relativist.

5.1 The Standard Definition of Knowledge and Its Problems

While criticising Protagoras’ relativism, Plato searches for the real definition of knowledge in the *Theaetetus* (2019) dialogue. Out of Plato’s formulations of the concept of knowledge, the best is probably the following:

True judgement with an account (logos) equates to knowledge.

Based on this is the so-called standard definition of knowledge, according to which knowledge is a justified true belief. There are three parts to the standard definition of knowledge (p refers to the subject of the belief, or the proposition):

\[ X \text{ knows } p \text{ if and only if} \]
1. X believes that p;
2. It is true that p;
3. X is justified to believe that p.

Worth noting is that this definition does not take the context of knowledge into consideration. The standard definition has been the subject of a heated debate ever since Plato’s time. Every part of it is significant. A good starting point to it is that knowledge is someone’s belief; the person X who has knowledge also actually believes in it. Although this condition does not often receive much attention, in relation to relativism, it is significant that a belief is someone’s active doxastic attitude, their cognitive relationship to a proposition. Including a person in it incorporates a temporal and cultural context to epistemological problematics. Knowledge is not timeless and anonymous knowing.

There have been extensive discussions on conditions 2 and 3. Condition 2 means that knowledge cannot be untrue. We would not say that X knows that p if we knew that p is untrue. Condition 3 means that we have good justifications for a belief, avoiding the unintuitive situation where we could accidentally have knowledge, as a product of good luck.

One of the founding premises of the standard definition of knowledge is the differentiation between truth and justification. Because of this, it is possible that a claim could be untrue even if it has been justified. In this case, we could not have knowledge, according to the standard definition. But then, a claim could be true even if we do not have justifications for it. This kind of claim could produce knowledge when we find new evidence and new justifications.

The difference between the truth and justification is diminished in epistemic theories of truth, where justified beliefs are considered to be true. However, the most interesting formulations of the epistemic theory of truth tie truth together with justification in ideal conditions or at the conclusion of a study. These cases recognise that a belief that was justified at a certain point could prove to be untrue because all of the factors affecting the truth could not be taken into consideration at the current stage of the study.

As natural as this concept of knowledge feels, it too has its problems. Condition 2 is strong in the sense that we cannot indeed always “know” which of our claims are true. The standard definition can therefore be called metaphysical: Knowledge refers to something that is at least partially unattainable. Of course, we could always believe to know.1 However, I do not want to deny that we have a lot of knowledge that we can be relatively sure about. Such are many beliefs about C-reality, which are about the observable and experienceable world, and, for example, mathematical truths. The only way to pursue knowledge is to acquire ever better justifications for our beliefs. Wittgenstein sums this up: “‘I know’ often means: I have the proper grounds for my statement” (1958c, § 18). However, even the best justifications do not guarantee the truthfulness of a belief, as fallibilism emphasises.

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1 “Believes to know that p” is expressed as the formula BKp in epistemic logic, where “B” refers to believing and “K” to knowing.
Edmund Gettier (1963) has provided a strong counterargument to the standard definition that is based on the weakness of justification. It can be presented in the following way, for example. Imagine that during the evening, I see my philosopher friend Paul walking in the park, and I conclude that a philosopher is walking in the park (sentence p). Actually, the walker was another philosopher, Josh, who happened to be wearing exactly the same outer garments as Paul wears. In the dark, I mistakenly thought he was Paul. I believe in p based on what I saw, which is a strong justification, but p is actually true because of other justifications than the one that I based my belief on.

Gettier’s problem shows that condition 3, justification, must be changed in one way or another to exclude the possibility of knowing something because of good luck, rather than evidence, from the standard definition. No one has been very successful at this, which is why there have been attempts to redefine the concept of knowledge in a way that it does not need to refer to justification (Williams, 2001, Chap. 2). One solution is to tie knowledge together with causality: The belief that p is knowledge if the fact p causally brings about the belief (Goldman, 1967). Then the fact must be an ontological o-fact (see Sect. 4.2). Specifying such a causal relationship, however, is very difficult. A more promising approach is to refer to those psychological processes that form beliefs (reliabilism) or to the intellectual virtues of a person. According to reliabilism, a true belief is justified only if the belief is the result of a reliable process. Reliabilism does not assume that the person would themselves be conscious of whether the methods or processes that they use are reliable (externalism). Virtue epistemology emphasises the intellectual virtues of a person, which include characteristics of the person, such as curiosity, honesty, objectivity and understanding (Sosa, 1980). Some of the problems of this approach are the stability of virtues and the weak connection to the contextual conditions of knowing.

The concept of knowledge has transitioned from considering truth claims to be the objects of beliefs to be the process of producing them—to the subject of the knowledge and her action. Dreyfus and Taylor (2015) discuss the classical (Descartes, Locke, etc.) mediational concept of truth, according to which knowledge is the idea in a person’s mind that corresponds to the objective reality. When we consider a person’s existence in the world to be the starting point for the theory of knowledge, we arrive at the contact theory, where the subject of knowledge actively interacts with the environment around her.

The question of external chances is also related to the problematics of knowledge. This can be seen from John Hawthorne’s (2004) analysis of the relationship between the lottery and knowledge. Hawthorne’s puzzle is the following: We do not think we know that a given lottery ticket will be a losing one, yet we normally count ourselves as knowing all sorts of ordinary things that entail that its holder will

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2 Hawthorne’s puzzle is similar to the “future sea battle” problem: What is the truth value of the statement “There will be a sea battle tomorrow” today (cf. von Wright, 1984)?
not suddenly acquire a large fortune. Let us analyse this problem by using epistemic logic. We can see its structure in the following example:

Assume that I have a (winning or losing) lottery ticket.
I know that if I win the lottery, I will be able to travel to Paris next summer.
I know that I cannot travel to Paris next summer, because I cannot afford it.
Therefore, I know that I will not win the lottery.

This conclusion goes against our intuition about the random nature of the lottery. In order to see the prevalence of the paradox, we will examine a more ordinary example. I know that I will have dinner with my friend in 2 weeks. If I, however, have a heart attack before that, I will not be able to make the dinner. It seems as though I know that I will not have a heart attack before the dinner, which is an impossible thing to know.

The common structure of this problem is the following (p = “I will win the lottery” and q = “I will be able to travel to Paris next summer”):

I know that p implies q: \( K(p \rightarrow q) \) (or equivalently \( K(\neg q \rightarrow \neg p) \))
I know that not q: \( K\neg q \)
Therefore, I know that not p: \( K\neg p \)

This conclusion is valid in theory. The problem is that the knowing in the second premise is relative, not absolute, because the truth of the sentence q (“I will be able to travel”) depends on future conditions (the result of the lottery) that I do not know. The second premise should be replaced with the formula \( ((K\neg q) \rightarrow \neg p) \), which would mean that I know that I cannot travel only if I do not win. The following conclusion would then be valid.

\[
K(p \rightarrow q) \\
(K\neg q) \rightarrow \neg p \\
K\neg p
\]

The solution then requires a conditional concept of knowing. The lottery puzzle demonstrates that knowledge has presuppositions:

Sentence q is a presupposition to knowing that p if the negation of q implies not p: \( (\neg q \rightarrow \neg p) \).

In theory, there are an infinite number of these presuppositions, and they cannot ever be exhaustively known. For example, I know that I will have dinner with my friend in 2 weeks only if I do not have a heart attack before this, or if I am not run over by a car, or if my friend does not die, etc. Almost all knowing has corresponding presuppositions. However, in practice, we must act as if we know all of the presuppositions: I will not be run over by a car, etc. We assume that things will go on as they have before, normally, without any intervening changes. This assumption can be called the assumption of continuity:
We know certain things with the assumption that no significant factor will disrupt the course of events and that the conditions are “normal.”

The previous discussion demonstrates that the standard conception of knowledge portrays the nature of knowledge insufficiently, and partially erroneously. The condition “justified belief,” especially, must be broadly understood to mean that justification is conditional, dependent on whether the conditions are normal or disruptive and if it is possible to avoid all epistemic risks. Knowing presupposes accepting the principle of continuity, which can be compared to Hume’s conception of causality as presentiment.3

5.2 The Possibility of Objective Knowledge

Included in the concept of knowledge are the elements of justification and truth. Both elements are relative. However, this relativity does not necessarily lead to the subjectivity of knowledge, to knowledge always being knowledge only to a single subject. Subjectivity would be damaging to the collaboration of people, as collaboration requires certain shared views of reality, the conceptions of other people, and shared values. This is why knowledge must be “saved” from subjectivism. We need a concept of objective knowledge.

The question relevant to my approach is how objectivity and relativism go together. The answer depends on how objective knowledge is defined. The objectivity of knowledge can be examined in two different ways. According to the realistic view, a belief is objective knowledge if it corresponds to the objective reality. According to the consensus view, knowledge is objective because it is shared by society. Truth and justification are seen in different ways in each of these interpretations. Realism emphasises correspondence with the world, while the consensus view emphasises the coherence of beliefs. Rorty (1980, p. 170) demonstrates the difference between these interpretations by using the terms “accuracy of representation” and “social justification of belief.”

The traditional theory of knowledge examines knowledge from the point of view of an individual. The definition of knowledge concerns the individual who believes and who is justified in her belief: “S is personally justified in believing that p” (Williams, 2001, p. 32). These justifications are seen to be under the control of the individual. This can be called the “Robinson Crusoe theory,” because the knower must obtain the justifications herself, without relying on others. Robinson Crusoe could, therefore, produce objective knowledge on a deserted island. In social epistemology (Goldman, 2010), the justifications of knowledge are at the disposal of the society, and the person who knows can know even if she herself does not have all of the justifications: The justification of knowledge takes place in society, or in

3 The assumption of continuity is often tacit, considered to be self-evident. It can be compared to Wittgenstein’s hinge propositions, which I will discuss at the end of this chapter.
conversation and social practice, as Rorty suggests (1980, p. 170). This leads to a different kind of definition of knowledge than in individualistic epistemology. Social epistemology can, however, be developed further in many different directions, as we will see.

5.2.1 Objectivity as Correspondence

Sceptics placed obtaining objective knowledge under doubt. The suspicion and nihilism of sceptics can be summed up in the following theses presented by sophist Gorgias (~483–375 B.C.E.).

1. Nothing exists.
2. Even if existence exists, it cannot be known.
3. Even if it could be known, it cannot be communicated.

The last thesis leads to subjectivism, which in its extreme form believes only in the existence of a personal internal world. Instead of wasting space in disproving these theses, I will consider their opposites. I do not wish to minimise the challenge that scepticism poses to epistemology by disregarding it; Williams (2001), for example, used it as his starting point for developing all of epistemology. The previously discussed concept of classical knowledge was Plato’s answer to the sceptics’ claims. An objective concept of knowledge is necessary for replacing the sceptics’ subjective concept of knowledge.

According to Niiniluoto (1980, p. 139), realistic theories of knowledge assume that the existence and characteristics of an object of knowledge are independent of a conscious subject. The object of knowledge is reality, and it determines the truthfulness of the knowledge. Knowledge is objective if it corresponds to reality as it is. The objectivism of epistemological realism can be summed up by two theses (cf. Baghramian, 2004, p. 144):

- Objectivity is defined in relation to non-human reality.
- Reality is described without a reference to particular human beings.

Hatcher (2002, p. 24), who has developed a viewpoint theory, formulates the theses of objective knowledge to correspond directly to the sceptics’ three doubts.

1. There does exist a mind-independent (objective) reality whose intrinsic features or qualities are independent of the mental states of the knower.
2. It is in principle possible to apprehend these objective qualities, if not wholly and perfectly, at least to a significant degree.
3. It is possible to formulate or articulate this understanding in a manner that allows us to communicate it to others and to validate the independency (or invariance) of this understanding under certain changes of points of view.

Hatcher’s theses are epistemological realism, but, unlike standard realism, he also considers points of view. I have italicised the end of the third thesis because it is one
of the central themes in this book, and is not discussed enough in the analyses of objectivism. The first thesis rejects absolute subjectivism. But then, the thesis does not claim that all of the characteristics of reality are independent of the subjective spaces of our minds.

The second thesis defends the possibility of being conscious of the world. The qualities of reality can be acknowledged in significant measures; for example, they can be sufficiently specified for the practical needs of people. Epistemological scepticism denies that we could obtain objective knowledge of the world.

The third thesis requires some further elaboration. Although each of us has our own authentic internal world, we can, through language, communicate messages about our internal worlds to other people. Communication contributes to the formation of shared conceptions of the world, and these shared conceptions are usually more objective than our completely subjective personal views.

A significant amount of people’s subjective beliefs can be expressed with the use of ordinary language, and are therefore accessible to and accessible by everyone. Hatcher (2002, III 2) calls this the objectification of points of view. Different beliefs meet in a community, and they are subjected to criticism that weeds out the most subjective beliefs.

A relativist may accept the realist view about the existence of an objective reality that affects our senses and experiences: If the world were different than it is, our observations and experiences would also be different. But against realism, the subject also affects what our knowledge develops into. We do not have a way to directly know what the world is like, as it is. We always use conceptual and other tools that affect how the world appears to us. These tools also change reality, as Heisenberg’s uncertainty principle demonstrates. Action in the world also changes it and affects the acquisition of knowledge.

In his book *Mind and the World Order* (1956), C.I. Lewis extensively discusses the relativity of knowledge. According to him, knowledge is relative to the knower, the subject of the knowledge, and therefore knowledge is always conceptual and interpretive (p. 166). This does not mean, according to Lewis, that the object of the knowledge is not independent of the conscious subject. He refers to the logic of relativity in this context, and presents it in the following way. Let us assume that

1. A is X relative to R, and
2. A is Y relative to S.

X and Y are not the “absolute characteristics” of A here. Instead, claims 1 and 2 are “absolutely true,” meaning that neither of these claims could be true if A did not have a nature independent of R and S. However, we do not necessarily know what this nature independent of the relations R and S is. Lewis’ concepts here are not the most optimal, but his example of measuring the length of an emperor’s cloak clarifies it some. The length is always measured using a scale, such as an alnage, but the length of the object, or rather that it has a length, is independent of measuring it. Of course, it would be absurd to ask what the “correct” length of the cloak is. We see different lengths by using different units of measurement. The true length of the cloak can be seen as the final result of these different measurements.
Lewis (1956, p. 170) analysed the nature of knowledge using the concept of function. Our knowledge and experiences are the function of two variables, the subject and the object. The subject is the conscious mind, and the object the object of consciousness independent of the mind.

Knowledge = Function (subject, object)

This formula can be used to describe relativism in relation to certain other epistemological approaches. The object of knowledge exists, but which object is in question can only be determined relative to the concepts in use. We cannot talk about a plain object outside of our concepts, as idealism assumes. Referring to function is a way to describe that both the mind and reality affect our knowledge. We do not know how, exactly, the world affects it, but it is always present in our observations and experiences.

I will expand on Lewis’ analysis to include points of view. The point of view we use gives us a map of reality, a set of beliefs about entities and their characteristics. If we were to have another kind of point of view, we would have another kind of map. Then again, no matter what the point of view is, we generate beliefs based on the object. What appearance a point of view gives of a phenomenon is the function of the point of view and the object, and therefore both of them affect it.

Knowledge = Function (point of view, object)

An aspect of an object represents it in the point of view, and it is through this that the point of view affects our knowledge. As I presented in the previous chapter, the viewpoint-relative concept of truth is objective: It can be considered “semi-realistic” because within it, truth corresponds to the aspect. In this sense, we can also talk about objective knowledge in a viewpoint-relative framework. Knowledge is a contextual concept, where the point of view of the knower is part of the context. This results in relativity within the concept of knowledge. In a realistic approach, objectivity corresponds to the objective reality independent of points of view and is thus incompatible with viewpoint relativism.

5.2.2 Objectivity as a Consensus

The objectivity of knowledge and science has been considered in new ways in the last few years (see Biddle & Kukla, 2017; Daston & Galison, 2007; Douglas, 2004; Koskinen, 2018). Objectivity is the reliance on the whole process of obtaining knowledge. Koskinen (2018) proposes defining objectivity by combining trust and averting epistemic risks. Humans are mistaken about a lot of things, which is why, inevitably, there are risks involved in the process of cognition. Epistemic risks are risks that arise from our imperfection as epistemic agents. Epistemic risks are those to do with human errors and faults in pursuing knowledge (Biddle & Kukla, 2017). According to Koskinen (2018), “illusions, subjectivity, idiosyncrasies, and collective biases are important epistemic risks arising from our imperfections as epistemic agents.” If we
were to combine epistemic risks with epistemic virtues, we could say that epistemic virtues help us to avert epistemic risks, but epistemic vices subject us to epistemic risks. There are essentially an infinite number of epistemic risks, so eliminating them is always relative. When we call a belief objective, we endorse it, rely on it and recommend that others rely on it as well. Objectivity requires trusting that "significant epistemic risks arising from our imperfections as epistemic agents have been effectively averted" (Koskinen, 2018). Objectivity here is communal: All of the members of a community rely on the claims and believe that the epistemic risks have been averted in the community. However, objectivity does not, by definition, require truth.

My approach to defining objective knowledge is based on the viewpoint theory and the idea of averting epistemic risks. The critics of relativism tend to state that the dependency of truth and justification on points of view excludes objectivity. Instead, I state that objectivity without points of view is quite narrow. Objectivity with many points of view provides a many-sided picture about reality. To clarify the point, let us suppose that we are talking about an epistemic community, denoted by C, and about points of view that are recognised in C. The question is how different points of view affect the status of beliefs. There are two options here. By applying the definitions of the logic of points of view, we can differentiate between absolute and relative truths. We say that belief p is \(C\)-invariant (absolute) if p is true from all of the points of view in C. We say that belief p is \(C\)-relative if p is true from some point of view in C but possibly not from all points of view. Now I will present two concepts of viewpoint-dependent objective knowledge defined in terms of C-invariance and C-relativity.

Let us start from C-invariance. Hatcher (2002, pp. 24, 44–49) defines objectivity as invariance under changes of points of view. Invariance means that nothing significantly changes when examined from different points of view. Some beliefs are completely personal and unique. Others, meanwhile, are shared by all the members of a community. Only those propositions whose truth is invariant in relation to changing points of view could be objective knowledge (Fig. 5.1).

By following that idea, we say that the belief p is \(C\)-invariant objective knowledge if and only if.

1. p is C-invariant, and
2. it is trusted in C that all of the relevant epistemic risks related to p have been averted.

Fig. 5.1 Objectivity as invariance under changes of points of view
Because \( p \) is \( C \)-invariant, \( p \) is true for all the members of a community, and absolute in that sense. The definition does not rely on viewpoint-independent truth, but on truth from all points of view. This is a variation of the consensus theory. Condition 2 does not require that each member of the community is able to justify the belief. It only requires that all the factors that reinforce or undermine the truth are taken into consideration in the community. Averting epistemic risks includes that the belief has been examined from all relevant points of view. Relevance depends on what the epistemic system of the community is. Reliance on objectivity means relying on experts and scientists who are considered to know the methods and to be able to justify the belief. One could say, in a roundabout way, that according to condition 2, the members of a community must know that someone in the community knows that \( p \).

Although objectivity as invariance expresses well the standard notion of consensus, we can ask what is the scope of objective knowledge, and how often a consensus is reached. Disagreements are typical to epistemic communities (be they scientific, religious or whatever). Because \( C \)-invariant beliefs are absolute (in \( C \)), they face the general criticism presented against absolutism. Let us now examine the possibility that objective knowledge could be relative. Take \( p \) as such a belief that both \( p \) and \( \neg p \) are \( C \)-relative; that is, they are both true from some points of view. This means that \( p \) is not \( C \)-invariant. To be knowledge, \( p \) or \( \neg p \) must be justified in the community. Realistic intuition is that only one of \( p \) and \( \neg p \) could be justified. This is an absurd situation, because both are true. To solve the puzzle, we have to connect justification to the points of view from which beliefs are true. For example, if \( p \) is true from the point of view of gender studies, then its justification must also be based on gender studies. In this approach, the aspects highlighted by points of view can be very different, and therefore the justifications of knowledge within them are different as well. This feels like a natural starting point for defining objective knowledge. For that we have to relativise both the truth and the justification of beliefs to points of view.

We say that a belief \( p \) is \textit{\( C \)-relative objective knowledge} if and only if

1. there is a point of view \( \text{PoV} \) in \( C \) from which \( p \) is true, and
2. it is trusted in \( C \) that all relevant epistemic risks related to \( p \) from the point of view \( \text{PoV} \) have been averted.

Point of view is objectively highlighted in this definition. Point of view \( \text{PoV} \) is recognised in the community, and claim \( p \) has been assessed from this point of view. This definition does not exclude that \( p \) could be untrue from another point of view. However, condition 2 means that if \( p \) is examined from the point of view \( \text{PoV} \), then it is justified. In a viewpoint-relative concept of truth, the truth of a statement is determined as the truth in relation to an aspect of an object. This is why justifying a statement is related to the aspect. The definition allows that sometimes even opposing claims \( p \) and \( \neg p \) could be objective knowledge. Objective knowledge is not absolute because it is dependent on points of view. However, objective knowledge is not subjective either, as it requires the objectification of points of view and social justifications. After all, the objectification of points of view means linguistic expli-
cation, a central part of which is bringing out an aspect of a point of view. Because of objectification, the members of a community become conscious of points of view.

These two concepts of the objective knowledge are related. Note that C-relative beliefs could be C-invariant. So, if a belief is C-invariant objective knowledge, it is also C-relative objective knowledge. The converse is not valid. The picture of C-relative objective knowledge is like mosaic with many points of view. There might be contradictory beliefs that are objective knowledge. In this sense our definition confirms the basic intuition behind relativism: there are incompatible statements that might be equally justified. If the statements p and non-p are objective knowledge, there exist two points of view from which p and non-p are true, respectively. Identification of these points of view solves the disagreement between p and non-p.

I like to stress that the definition of objective knowledge presented above differs considerably from the consensus theory presented by Rorty (1980). It considers knowledge to be that which society considers to be justified in the means available to us. Because the definition does not require truth from knowledge, it is possible that knowledge will prove to be untrue in the sense of the intuitive concept of truth (C-truth). In my theory, objective knowledge must be true, but truth is relativized to points of view; truth is not correspondence with absolute reality. Objectivity comes from the elimination of epistemic risks. My definition of viewpoint-relative objective knowledge combines objectivity and viewpoint-dependency. A claim is recognized knowledge from a certain point of view within a community. This does not, however, remove the need to strive for invariance and to find truths that are shared by all. It means comparing points of view and finding common understanding. Points of view are not stable; they can change with better arguments and new evidence. Invariant knowledge is achieved from the process of comparison and argumentation, where disagreements are resolved. Disagreements are not about only factual claims, but also justifications, epistemic systems, as we will see in the next section.

Could we consider that objective knowledge is the ideal limit toward which our knowledge converges when all points of view are taken into consideration? In this limit we would have absolute knowledge. I have severe objections towards the possibility to reach such limit. Especially many points of view are subjective based on idiosyncrasies, personal experiences, emotions, different interests etc. The picture of knowledge I have consists of both relative and invariant knowledge: invariant knowledge expresses the “common world” and relative knowledge reflects the possible points to view into this world. Like Leibniz presented in Monadology, the world with (infinite) perspectives is better that the absolute world with just one divine point of view.

In this context, it is useful to consider what Rorty says about objectivity and subjectivity. He distinguishes between two kinds of objectivity: objectivity as correspondence and objectivity as agreement (1980, pp. 333–342; see also Habermas,

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4 The anonymous referee of the manuscript made this proposal.
There are also two concepts of subjectivity corresponding to these two forms of objectivity. Those who prefer objectivity as correspondence tend to associate the subjective with the “emotional” or “fantastical” (p. 339). But when you see objectivity as agreement, you consider objectivity to be a result of the consensus of rational discussants. Then “subjective” consideration is “one which has been, or would be, or should be, set aside by rational discussion” (p. 338). In viewpoint relativism, points of view are subjective but not necessarily emotional (or irrational). When looking for objective knowledge in epistemic communities, one has to consider different points of view. Some of them might be “subjective” in the sense that they are irrelevant to the subject matter of discussion (or research). They could be set aside because of their irrelevance, not because of their emotionality. The way to objective knowledge goes through identifying new points of view and eliminating those that are irrelevant. When one finds relevant points of view, she is able build a multi-faceted picture about reality that is richer and “truer” than a collection of invariant truths. Of course, there is no absolute concept of relevance; relevance is dependent on circumstances like practical issues.

5.3 The Relativity of Justification

According to the classical conception of knowledge, knowledge cannot exist without justification. The justification of a claim usually means its reasons (grounds) or causes of considering it true. When someone’s belief is doubted, they may give it justifications, or they may dismiss the objections. A claim can be as simple as “It is raining outside,” which can be verified by looking out the window. A claim can also be an abstract theory, such as the general theory of relativity, which has been justified by the means of sophisticated telescopes and measuring diffraction in space.

The reasons and causes for a belief must be kept separate. Someone may believe that dogs are dangerous because they were bit by a dog as a child. Another person may believe that the leaves of a tree are green because they have only seen green trees. A person may then have a cause for holding a certain belief. The person may not even know where their belief has originated from, or how it emerged. The reason for a belief is something that a person can appeal to when believing in something. Having a reason is conscious, while reasoning, or justification, is a reflexive and rational process where a person examines their belief from the outside, looking for evidence for it. In my own analysis, I will observe internalism and examine justifying knowledge using the terms of consciously looking for and weighing knowledge (See Williams, 2001, Chap. 2).

In order to better understand the nature of epistemic relativism, we can place it in the broader epistemological context of epistemic pluralism (see Coliva & Pedersen, 2017). According to pluralism, there are many ways to be justified, warranted, rational, etc. Similarly, there can be many epistemic principles, methods and goods. The opposite of pluralism is epistemic monism, according to which “there is only one way for a belief to be justified (warranted, rational, good, etc.)”
5.3 The Relativity of Justification

(p. 7). Monism has been the subject of growing criticism in the last few years. Simultaneously, epistemic pluralism has exposed new interesting research questions. According to epistemic pluralism, there are different criteria for justification, and they are differently suited for different situations. Pluralism is then open to the scope problem of justification: “No single traditional account of justification has the scope sufficiently wide to accommodate the relevant range of epistemic evaluations” (p. 9). Monism leads us to pursue a unifying epistemic theory that apparently cannot be found.

For pluralism, epistemic relativism is a way to define epistemic concepts and criteria. It is not yet philosophical relativism to acknowledge that we have very different, and even contradictory, conceptions about many things. The question that is central for relativism is if justification in itself is relative, and if the criteria, principles or standards of justification are relative.

5.3.1 Epistemic Viewpoint Relativism

I will now approach epistemic relativism through the so-called system-relativism. According to it, claims of justification are related to epistemic systems (see Coliva & Pedersen, 2017; Kusch, 2019; McKenna, 2017). An epistemic system can be defined as a group of epistemic standards or principles that have been ordered by importance. Standards are the methods and criteria for acquiring, valuating and justifying knowledge. They include observation, reasoning, rationality, intuition, revelation, probability, epistemic virtues, etc. According to Carter (2017, p. 231), epistemic principles are “general normative propositions that specify the conditions under which certain beliefs have positive or negative epistemic merit.” An epistemic system, therefore, includes a set of standards that is used to assess justification. Standards can also be ordered by importance so that a more important standard has more weight; for example, induction can weight more than deduction, or intuition more than rationality. Claims of justification are always made within some epistemic system. Different epistemic systems can even justify contradictory claims about the same phenomena.

I will compare epistemic relativism to epistemic realism, which can be considered a form of epistemic monism. According to epistemic realism, each claim of justification is absolutely true or untrue (see Pedersen, 2017). That a statement is justified is an absolute fact (o-fact, to use the term from the previous chapter). According to realism, there is a unique right concept of justification and a true theory of justification that objectively describes which claims are justified. The tendency for monism often comes from justification being considered from only one criterion, the truth.

References are often made to only certain standards being truth-conducting, or giving evidence of the truth (see Belleri, 2017; Pedersen, 2017). In these cases, it is thought that truth is the only real epistemic good, and that the standards that realise that good the best are right and “objective.” But other epistemic criteria exist than
just truth. For example, *understanding*, *systematisation* and *coherence* are epistemic goods to be taken seriously and that must be considered in questions of justification (Pedersen, 2017, pp. 63–68). *Understanding* is a very relevant criteria for justification in humanities and social sciences, which is emphasised by hermeneutics, for example. *Systematisation* is an important criterion for justification in data-based studies. *Coherence* is emphasised when we talk about justification in epistemic communities. The coherence of beliefs is then a central issue.

Even if we were to accept that truth is the only real or fundamental epistemic good, we would still have to make decisions about which truth-conducting epistemic standards are emphasised. For example, should we give more weight to deduction than to induction, to definitions than to deductions, to descriptions than to explanations, to observations than to measurements, to qualities than to quantities, etc. These standards also change depending on areas of knowledge. Natural sciences, for example, have different standards than social sciences do. The argumentations of laymen have different standards than the argumentations of experts or priests. Standards also change with time. Introspection, previously so central to philosophy, has lost its meaning. Meanwhile, statistics, which is based on the concept of probability, was not created until the seventeenth century (Blaise Pascal, etc.), so an equivalent method did not exist before that.

Boghossian’s critique (2006b) has strongly influenced the discussion on epistemic relativism. According to him, typical for relativism is to claim that (p. 73):

There are many fundamentally different, genuinely alternative epistemic systems, but no fact by virtue of which one of these systems is more correct than any of the other.

This claim is often presented as two theses:

- **Pluralism thesis**: There are alternative epistemic systems.
- **Equality thesis**: All epistemic systems are equally correct.

However, Boghossian’s definition is problematic. The pluralism thesis is, of course, central, because epistemic questions related to different epistemic systems are exactly the kinds of questions examined in relativism. What is dubious here is adopting the equality thesis as the defining factor of relativism. There are many relativists who do not accept the equality thesis (see Kusch, 2019; Rorty, 1982, p. 166). In my own basic thesis of viewpoint relativism, I have emphasised the comparability of points of view with different criteria rather than committing to the equality thesis. The basic idea of relativism is that we do not have neutral ways with which to resolve epistemic disagreements. Relativism’s critics, such as Mosteller (2008), believe that epistemic disagreements can be resolved at a meta-level that offers neutral criteria. But as I have demonstrated in Chap. 3, there are no guarantees that such neutral criteria can be found. This means that we do not have absolute justifications for taking one side or the other in the debate. We do not think that only one of the contradictory claims or incompatible systems could be objectively justified. This is a completely different matter than defending the equality thesis. This thesis must be replaced with another that emphasises the lack of neutral criteria. It is from this basis that epistemic relativism can be adequately defined.
I consider epistemic relativism to be a form of relativism that accepts three theses:

- **Relativity thesis**: Claims of justification are relative to epistemic systems;
- **Pluralism thesis**: There are several different epistemic systems;
- **No-neutrality thesis**: There is no neutral way to settle conflicts of epistemic systems.

The relativity thesis means that claims of justification must be set in relation to epistemic systems. The completed formula (F) of claims of justification is:

\[ F: \text{A statement } p \text{ is justified relative to an epistemic system } E. \]

The sentence “p is justified” is incomplete, and cannot be assigned a truth value without referring to an epistemic system. However, the statement F can be assigned a truth value in a relative way:

“A statement p is justified relative to an epistemic system E” is true if and only if the sentence “p is justified” is true relative to the epistemic system E.

The epistemic system E is part of the context of assessment of a sentence. Taking the relativity thesis and the viewpoint-relative conception of truth into consideration, the following implication is valid:

If p is justified, it is justified relative to some E.

The pluralism thesis is a logical consequence of rejecting monism. The condition “no neutral way” of the no-neutrality thesis means that we cannot detach from epistemic systems to justify claims, and that we do not have neutral criteria to appeal to with which we could place one system above the others or claim that a certain system is correct. Contrary to the equality thesis, the no-neutrality thesis does not claim that all epistemic systems are equally as good. One can be better than the other, but not absolutely; only according a certain criterion. This criterion could be the relevance of belief for action.

Epistemic relativism thusly defined differs from extreme relativism, which accepts the equality thesis. It denies that epistemic systems could be compared: all are as good or as bad. An “anything goes” stance might follow from this, preventing a search for a solution to epistemic disagreements. Moderate relativism, such as viewpoint relativism, instead highlights the comparability of epistemic systems and points of view based on different criteria. These criteria, however, are not absolute, but viewpoint-dependent.

In Chap. 3, I defined viewpoint relativism as the hypothesis that viewpoint-relative epistemic questions exist. According to this, epistemic viewpoint-relativism is epistemic relativism that states the existence of viewpoint-dependent questions of justification (“Is statement p justified?”). The hypothesis does not assume that all questions of justification are viewpoint-dependent. Answering questions of justifi-

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5 As Kusch (2009) points out, it is not necessary to use the relative “justify” predicate in this approach; justify-in-E.
cation requires us, according to the hypothesis, to refer to points of view. When we talk about justification, the points of view that are relevant are those that are about choosing epistemic standards and ranking them in an order of importance based on some principle, or choosing an epistemic system. The pattern of justification is therefore:

*Epistemic point of view → epistemic system → justification.*

This pattern helps to structure the no-neutrality thesis. Because, according to the viewpoint theory, no neutral points of view exist, then neutral ways to defend the epistemic system also do not exist. But instead, we can put epistemic systems in order based on the criteria within a point of view. One epistemic system may therefore be the best or correct from a certain point of view.

Viewpoint relativism leads to analysing the factors of choosing epistemic standards and systems. These factors are not the internal factors or meta standards of epistemic systems. Points of view can rather be compared to *stances* (see Kusch, 2019; van Fraassen, 2002). Stances are bundles or systems of values, emotions, policies and preferences. A stance is an intellectual attitude and commitment, and has a strong emotional component.

Epistemic points of view are often developed from the position of the knower/assessor. A good example of this is the accuracy of the standards of knowledge in different situations (McKenna, 2017). Let us examine a simple example. I am in an unfamiliar city, and looking for the statue of a famous philosopher. I ask passers-by (A) if they know where the statue is. A1 claims that it is in the city, A2 says that it is downtown, and A3 says that it can be found at 17 Main street. A1’s answer is inadequate to me. A2’s answer could be adequate if I were in a different part of the city. A3’s answer is adequate if I have a map. What is adequate information depends on the situation. To use McKenna’s terms, things can be known by high or low standards (p. 172).

More generally, an epistemic point of view is based on the history, situation, target, values, etc. of an individual/community. These factors are not directly epistemic, but they can still be relevant for knowing.

Knowing cannot exist without points of view; a stance is always a condition of knowing. Essential here is that epistemic points of view and epistemic systems interact with each other. What kinds of claims are justified within the framework of the adopted epistemic system can affect the point of view and lead to the adjustment of the system.

Hartry Field’s (2009) view of epistemology is very similar to the epistemic viewpoint relativism that I have presented. According to Field, justification is evaluation: “Regarding a belief as *epistemically* justified or *epistemically* reasonable is evaluating it *from an epistemological perspective*” (p. 250). Evaluating includes the epistemic perspective in the background: Perspective here is a norm, or norm-like. By “norm,” Field means such practical things as policies and preferences. He opposes norm realism, and rejects the interpretation that all norms are equally as good or that one norm could be absolutely better than the others. Norms have very different effects and meanings, and this affects choosing the norms. Field empha-
The contextualism that Michael Williams (2001) developed is relevant for epistemic relativism. According to it, the standards of justifying knowledge claims are not fixed, but change depending on the circumstances. The epistemic norms and standards that we use to justify our knowledge are set by us. According to Williams (p. 170), norms are not “standards imposed on us by ‘the nature of epistemic justification’.” Of course, we have not agreed to set them, but it has happened by adopting certain methods of obtaining and testing knowledge. Williams’ conception of epistemic norms is pragmatist.\(^6\)

The context of justification is affected by semantic, methodological, dialectical, economical, and situational constraints (Williams, 2001, pp. 159–162). By semantic constraints, Williams means that certain assumptions must be made about things without challenging them.\(^7\) Methodological constraints give a direction for acquiring or researching knowledge, and affect what the research can accomplish. Dialectical constraints are about what epistemic status we give to claims or beliefs: what we must question, and what the default value is. Economical constraints arise from the costs of research: Acquiring evidence or counterevidence costs money. In practice, we cannot study all of the possible factors. Situational constraints are those about the external factors of acquiring knowledge: which situation the claims have been made in or the belief has been formed in. Although Williams does not extend situational constraints to history or culture, I would not exclude them either.

Williams (2001, pp. 226–227) sums up the contextualism of justification in the following theses:

1. All justification takes place in a context of presuppositions and other circumstances which are not currently under scrutiny.
2. These presuppositions and circumstances can themselves be articulated and challenged, but only by a recontextualization of the original justificatory procedure, a recontextualization that will involve presuppositions of its own.
3. Recontextualization can go on indefinitely. But this is the open-endedness of inquiry, not a vicious regress of justification.

Although Williams distinguishes contextualism from relativism (by which he means rejecting objectivity), contextualism is well-suited to describe the viewpoint-relativist view of justification and rationality. Central to it is that a) we recognise all of the inevitable presumptions of all justification and b) accept continual re-contextualisation. To use viewpoint terms, it is a question of the emphases of the

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\(^6\)The opposite of a pragmatist approach is “epistemological realism” (William, 2001, p. 171), which Carter (2016, pp. 18–19) calls “meta-epistemological realism.”

\(^7\)Wittgenstein (1958c) called them “hinge propositions”; I will return to this later on.
justification standards generated by points of view and of the ability to change points of view by using the reflection and critique aimed at them.

5.3.2 Dispute About the Heliocentric System as a Case

The critics of the pluralism thesis deny that fundamentally different and authentically optional epistemic systems exist (ex. Boghossian, 2006b; Engel, 2017). A good example of this is the conversation that Rorty initiated about the case of Galileo Galilei. Galilei had a dispute with Cardinal Bellarmine. Bellarmine did not accept Galilei’s reasonings for a heliocentric system, and supported the geocentric system, appealing to the Bible. According to Rorty (1980, p. 330), Bellarmine and Galilei were using different epistemic grids to solve what kinds of evidence can exist for claims about the movements of planets. Additionally, the dispute was so profound that it could not be solved one way or another by using the epistemic standards of the day. Rorty presents the Bellarmine-Galilei dispute as proof for epistemic relativism.

Boghossian (2006b), meanwhile, analysed the same dispute, attempting to prove Rorty wrong and to prove that this is not about truly optional epistemic systems. Boghossian tried to clarify that Bellarmine appeals to the Bible and revelation, claiming that revelation is not a fundamental principle for Bellarmine. Instead, according to Boghossian, all of the principles fundamental to the argument are shared by Galilei and Bellarmine.

Kusch (2017a) has carefully analysed Rorty’s argument and Boghossian’s criticism of it. One of the central considerations is that both Bellarmine and Galilei accepted revelation in principle, but saw its application areas in different ways. Propositions of revelation can be separated into three groups (Kusch, 2017a, p. 214):

I. propositions about the natural world that have been demonstrated (by our natural lights, that is, by reason);
II. propositions about the natural world that in principle are demonstrable, but that have not yet been demonstrated; and
III. propositions about the natural world that are beyond demonstration.

Group II is a grey area that people can really disagree about. Bellarmine saw that the question of the movement of planets had to be solved by appealing to the Bible. Galilei thought that the heliocentric view had to be accepted, even if it was not yet conclusively proven. Appealing to the Bible is not justified in this situation, even if the Church thought that the question of the planetary system belonged in group III. This is the real difference between the epistemic systems adopted by Bellarmine and Galilei, and what led to a real disagreement.

While criticising Boghossian’s interpretation of the Bellarmine-Galilei dispute, Kusch presented a significant problem in Boghossian’s argumentation. Boghossian considers the epistemic system to be restricted and isolated from the broader context of the era, which included knowledge, skills, tools, history, scholarly disagreements,
interpretations about the Bible, etc. A comprehensive, holistic view of each epistemetic disagreement is necessary.

Kusch’s conclusion of this analysis is that both of the webs of beliefs adopted by Bellarmine and Galilei were coherent in themselves and understandable by the other. Although now the disagreement has been solved in favour of Galilei, what is relevant is that at the time of the disagreement, no neutral vantage point existed from which to solve which web of beliefs was correct. Kusch considers this disagreement to support epistemic relativism. Based on this, he reformulated the relativist position that he calls scientific pluralism (Kusch, 2017a, p. 222):

There are some fundamentally different, genuine alternative systems in the sciences. The fundamental difference between two systems S1 and S2 is not determined by fundamental principles appearing in S1 and not in S2 but by the difficulty of imagining a rational proponent of S1 convincing a rational proponent of S2 to switch her allegiance from S2 to S1. We have a fundamental difference between two systems when a switch would feel like an epistemic-cum-metaphysical trauma, dislocation or revolution in thought.8

The idea behind this definition is to emphasise the psychological commitment to disagreement.9 In a profound disagreement, both parties consider their own point of view and their own principles so “existential” that renouncing them would be like renouncing or converting from their worldview. In this, Kusch is closer to Kuhn’s (1970, pp. 150–151) view of committing to the paradigms of knowledge in the revolution of science: Paradigms only change when researchers change; few voluntarily abandon their own views. Wittgenstein’s (1958c, § 612) thoughts about the incommensurability of different language-games and the need to rely on persuasion when rational argumentation fails also fit this definition (cf. Kusch, 2017b).

If we use the idea that different epistemic principles are suitable for different areas of knowledge as a starting point, then epistemic relativism does not follow as such from their existence. Epistemic relativism is manifested most clearly in those situations where epistemic systems (principles) are incompatible, and there are no neutral criteria to prioritise the other with. Epistemic systems then concern the same area of knowledge, as in the Bellarmine-Galilei argument. A truly unsolvable disagreement is created. It should be noted that this disagreement was solved later on, when more compelling evidence was presented on behalf of the heliocentric system, and even the Church accepted it.

Epistemic viewpoint relativism does not assume that all epistemic disagreements are unsolvable. It is rather a question of interesting and non-trivial examples of epistemic differences existing that cannot be solved in certain historical and local circumstances (for an interesting other case, see cf. Sect. 8.2.2). The increase of knowledge, new evidence or new methods can still solve an epistemic disagreement that was considered unsolvable, as the Bellarmine-Galilei argument demonstrates. Steven Hales (2006, pp. 119–121), in turn, argued that no neutral grounds exist that can solve which belief-acquiring method, philosophical (intuition) or religious (rev-

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8 Kusch refers in this context to the concept of “stance” studied by van Fraassen (2002).
9 I consider disagreements and their solutions in detail in Chap. 8.
elation), is correct and leads to philosophical knowledge. It appears that Hales considers this essentially unsolvable.

5.4 Incommensurability of Conceptual Frameworks

According to epistemic relativism, many standards of justification exist, and they cannot be placed in an order of importance on neutral grounds. Some strong forms of extreme relativism claim that epistemic frameworks cannot even be compared. The basic arguments for or against strong relativism appeal to the incommensurability of frameworks. There has been a spirited and extensive discussion about incommensurability after the publication of Kuhn’s *The Structure of Scientific Revolution* (1970). Kuhn’s and his follower’s, Paul Feyerabend’s, variations on relativism seem to assume the incommensurability of paradigms (Feyerabend, 1962; Kuhn, 1970). Feyerabend (1975) discussed the anarchy of scientific methods: Science can use any method, and they cannot be compared or rejected on any basis. This appeals to the incommensurability of scientific frameworks or paradigms.¹⁰

There are two kinds of incommensurability: semantic and epistemic. *Semantic incommensurability* means that incommensurable frameworks cannot be translated to the others. Semantic incommensurability implies that worlds in different frameworks would be incomprehensible to each other. Kuhn also emphasised that when the scientific paradigm changes, all of the concepts change, and the representatives of different paradigms are as if they live in different worlds. Kuhn still considered translation possible, but emphasised that “to translate a theory or worldview into one’s own language is not to make it one’s own” (1970, p. 205). Instead, through translation, we can start to understand another’s worldview.

One of the most important pieces against epistemic relativism and incommensurability is Donald Davidson’s article “On the Very Idea of a Conceptual Scheme.” I will highlight a central argument from Davidson’s article:

Davidson claimed that the perfect untranslatability of language is a contradictory concept. If another language cannot be translated into one’s own, the other language is not a language for us: We do not understand it. In order to sensibly discuss the differences in languages, we must have enough shared truths or things we consider to be true. Then, however, differences in opinion cannot be radical and extensive. This is how Davidson concluded that the concept of an alternative framework is in

¹⁰ In my article, “Scientific change and intensional logic” (Hautamäki, 1983a), I have demonstrated that if theories are presented in a natural system of intensional logic, incommensurability does not apply. In this system, meanings are functions of the language to possible worlds, and these functions can be compared in many ways.
5.4 Incommensurability of Conceptual Frameworks

itself contradictory. Many of the critics of relativism repeat Davidson’s arguments and claim that relativism is committed to the idea that frameworks cannot be translated to one another (cf. Newton-Smith, 1982). Because frameworks can be translated to each other, epistemological relativism cannot be true, the critics argue.

There are assumptions behind Davidson’s argumentation that do not apply to all of the variations of epistemic relativism. For Davidson, “conceptual scheme” means the group of beliefs the size of natural language. A conceptual framework should not be compared to a whole language. A conceptual framework need not be total and encompassing of all things. Frameworks, such as in science, are local and are only about a certain area of research or experience, such as anthropology.

We can also question Davidson’s assumption that only incommensurable frameworks are radically different. Why could commensurable but still radically different frameworks not exist? Radicality is a question of degree. If, for example, two frameworks give different truth values to a central claim, they radically differ, but still can be compared in a shared coordinate system (compare with the Bellarmine-Galilei controversy).

Putnam (2004, pp. 50–51) presented an important argument against Davidson. According to linguist Whorf (1956, pp. 160–172), the Shawnee language is different than English, meaning that some expressions in Shawnee do not have an English equivalent. Davidson argued against Whorf, saying that the conceptual frameworks of these languages are not different because Shawnee can be translated into English. However, Davidson neglected to note that English was enriched through the translation, and expressions could be added to it that corresponded to the unfamiliar concepts of Shawnee. Putnam claimed that all of Davidson’s argument in his afore-mentioned article is incorrect and is based on the assumption that “translation leaves the language into which we translate unaffected” (p. 50). A translation can also enrich a language and teach it new things.

It seems, however, that many criticisms against Kuhn’s conception of incommensurability are based on misunderstanding his position. At least in one of his later articles about commensurability, Kuhn argued that his conception is that of local incommensurability, according to which incommensurability means that “there is no language, neutral of otherwise, into which both theories, conceives as sets of sentences, could be translated without residue or loss” (Kuhn, 1982, p. 670). Then Kuhn (p. 671) added that local incommensurability does not exclude the comparison of incommensurable theories:

The terms that preserve their meanings across a theory change provide a sufficient basis for the discussion of differences and for comparisons relevant to theory choice.

So, many concepts remain invariant under translation and they allow for comparison. (Cf. Hautamäki, 1983a).

Epistemic incommensurability means the profound differences in the methods for reasoning and justification. Ian Hacking (1982) discussed the different “styles of reasoning” that separate frameworks from one another. Different styles of reasoning decide which claims are such that their truthfulness or non-truthfulness can be discussed. A style of reasoning sets the questions that certain statements are meaning-
ful answers to. Relativism, or “anarcho-rationalism,” as Hacking called his approach, accepts the existence of different styles of reasoning. According to him, there are no neutral criteria with which these different styles of reasoning can be ranked.

Carter defined epistemic incommensurability by referring to the lack of a shared rational basis:

*Epistemic incommensurability*: it is possible for two agents to have the opposite beliefs which are rationally justified to an equal extent where there is no rational basis by which either agent could properly persuade the other to revise their view. (2017, p. 232)

I will concern myself with the latter part of this definition, which denies the rational basis of persuasion. A total incommensurability, of course, prevents comparison. However, a partial incommensurability allows for comparison. If frameworks are local, then they have a broader global environment within which they can be compared. As previously noted, O’Grady (2002, pp. 126–127, 138–142) argued in favour of globally comparing frameworks by relying on core rationality. I, myself, also defend core rationality, which we need in order to have a rational discussion. Rationality was not exhausted into core rationality: In addition to it, different specific principles or norms of rationality are used, and they can be incompatible with each other. Core rationality is not a yardstick against which we can rank all of the principles of justification. It is a platform or a tool with which we can make comparisons using different criteria, such as predictability, consistency, strength of evidence, practical implications, etc. Core rationality therefore presents the possibility of understanding different frameworks. Understanding, however, is not yet accepting, but it does open the doors to comparing frameworks and to learning.

The discussion on incommensurability extends to points of view, as well. We can make different interpretations about incommensurability, and they can be analysed using the logic of points of view. Points of view that have a different object and a different aspect are naturally incommensurable. More interesting are those points of view that have the same object, but different aspects. It is then a question of how the aspects relate to each other. Aspects can be incompatible in the sense that the same claims about an object can have a different truth value. This in itself does not yet make points of view incommensurable. Intuitively, it feels as if the points of view of science and religion, for example, towards reality, are incommensurable. However, it is very difficult to precisely determine incommensurability. It at least has to do with the ability to understand: S1’s point of view of something is incommensurable with the point of view of S2 if S1 and S2 do not *understand* each other’s points of view. This is different than *accepting*: Bellarmine and Galilei probably understood each other’s points of view, but did not accept them. They had different conceptions of which factors affected the accuracy of the theory. Wittgenstein’s thoughts on knowledge and its certitude are relevant in terms of this question.

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11 In the logic of points of view, the accessibility relation of operators R and A is a commensurability relation: Point of view i is the alternative to point of view i* if i and i* are “comparable and commensurable” (Hautamäki, 1983b). Hales also interprets this relation in the same way (2006, pp. 106–109). Different relations realise different interpretations of commensurability.
5.5 Epistemic Relativism by Wittgenstein


“The meaning of a word is its use in the language” is a central thesis in *Philosophical Investigations* (1958a, § 43). The concept of a language-game, presented in this work, has given rise to relativist interpretations. In a language-game, the use of language is intertwined with activity (§ 23). A language-game is a part of the form of life. The meanings of expressions depend on which language-game they are used in. No language-game can be assigned a special place, and no one can claim that that specific one is the correct one. Language-games have their own internal logic, but we lack a neutral metalevel language-game where they can be compared. Lyotard (1984) considered language-games incommensurable and defends relativism from this basis. I will, however, approach Wittgenstein’s relativism through his *On Certainty*.

In *A Defence of Common Sense*, G.E. Moore (1925) presented that we know a large amount of beliefs about ourselves and our bodies to be true: I have two hands, the world has existed before my birth, I dream, etc. We also believe that others have corresponding knowledge. Moore considered a part of these common truths to be “undeniably true.” The person who denies these beliefs is undeniably wrong, according to Moore, and in contradiction with their own views. We place a great trust in this kind of shared knowledge from experience.

In *On Certainty*, Wittgenstein considered the question behind Moore’s book, of what certainty of knowledge means, and what it can be based on. According to him, we must accept some certainties in order to know anything at all. We cannot even doubt anything unless something is certain. Wittgenstein thinks that “the truth of certain empirical propositions belongs to our frame of reference” (§ 83). A frame of reference is holistic: We believe in a complete system of statements where consequences and premises support each other. (§§ 141–142). Wittgenstein wrote:

All testing, all confirmation and disconfirmation of a hypothesis takes place already within a system. And this system is not a more or less arbitrary and doubtful point of departure for all our arguments: no, it belongs to the essence of what we call an argument. The system is not so much the point of departure, as the element in which arguments have their life. (§ 105)

Certain arguments are outside of doubt. They have been called “hinge propositions”, referring to passages like the following:

That is to say, the questions that we raise and our doubts depend on the fact that some propositions are exempt from doubt, are as it were like hinges on which those turn. (§ 341) That is to say, it belongs to the logic of our scientific investigations that certain things are in need not doubted. (§ 342) But it isn't that the situation is like this: We just can't investigate everything, and for that reason we are forced to rest content with assumption. If I want the door to turn, the hinges must stay put. (§ 343) (Underlines by AH)
Based on Wittgenstein’s argumentation, Duncan Pritchard (2015) has outlined “hinge epistemology.” According to it:

All rational evaluation is essentially local, in that it takes place relative to fundamental commitments which are themselves immune to rational evaluation, but which need to be in place for a rational evaluation to occur. (Pritchard, 2015, p. 66)

According to Pritchard’s analysis, Wittgenstein thinks that the hinge beliefs of different worldviews (or language-games) are fundamentally different. This means that different frameworks or worldviews become incommensurable because their beliefs are based on different hinge propositions (see Carter, 2017). Rational justification to resolve disagreements is then not possible.

In sections §§ 608–612 of On Certainty, Wittgenstein considered how to react to a person who does not accept our physics or the justifications we give it, and who relies on an oracle (see Kusch, 2017b). Could we consider his custom to be “wrong”? Wittgenstein answered: “If we call this ‘wrong,’ aren’t we using our language-game as a base from which to combat theirs?” (§ 609). Justifications no longer suffice in this combat; instead, we must rely on persuasion.

I said I would ‘combat’ the other man, - but wouldn’t I give him reasons? Certainly; but how far do they go? At the end of reasons comes persuasion. (Think what happens when missionaries convert natives.) (§ 612)

In other words, we would have to entice a person who thinks in a different way to join our view—to adopt our worldview and point of view. On Certainty clearly demonstrates that Wittgenstein is an epistemic relativist, if not downright an extreme relativist, although other interpretations can also be presented. For example, Pritchard (2015, p. 210) considered the possibility that different disagreements can have shared hinge propositions. This interpretation is supported by Wittgenstein’s thought that “Moore-like” experience sentences are such that barely anyone can deny them (cf. Wittgenstein, 1958c, § 93). These are depictions of a common and shared C-reality, to use my term. This is supported by § 156: “In order to make a mistake, a man must already judge in conformity with mankind.”

Wittgenstein’s thought about claims outside of doubt is significant in terms of viewpoint relativism because the claims can be interpreted as viewpoint-dependent. They cannot be known as such, but they are a prerequisite of knowledge, a certain kind of preknowledge. The sum of sentences about preknowledge is a picture of the world. A picture of the world is “the inherited background against which I distinguish between true and false” (Wittgenstein, 1958c, § 94). Pictures of the world can also change (see § 65, §§ 95–97, § 336). My suggestion is that the picture of the world, the preknowledge, is a part of the epistemic system because all justification and argumentation requires preknowledge. If an epistemic system is viewpoint-dependent, then preknowledge is also viewpoint-dependent: Certain statements are preknowledge (or hinge propositions) in relation to the point of view. If there are shared hinge propositions as Pritchard proposed, they are viewpoint invariant. By using Wittgenstein’s concept of preknowledge (hinge propositions), we can significantly expand on epistemic viewpoint relativism.
Chapter 6
The Relativity of Reality

Abstract According to conceptual relativism, reality crucially depends on the mind and the language of a person. The world does not present itself as already made or arranged. People have different ways of categorising and conceptualising the world. Because according to conceptual relativism, what exists also depends on conceptual frameworks, it can also be called ontological relativism. We must note that ontological relativism does not mean that the mind creates or generates reality and its objects as a craftsman creates a ceramic object. That would be idealism. Relativism does not deny that the world exists and affects our senses, experiences and knowledge. But despite this, we cannot know how the world is in itself. We do not have an absolute point of view that would reveal reality to us as it is. We must always build our world from some chosen conceptual foundation. In this chapter, I will first define what conceptual relativism is. Then, I will discuss natural kinds and the problematics of structuring reality. I will then present and compare Putnam’s internal realism and Searle’s external realism. In the last section, I will present how we can analyse and specify the central questions of conceptual relativism about individuation and categorisation using the theory of conceptual spaces.

6.1 Conceptual Relativism

The central thesis of conceptual relativism is that reality, that which exists, is relativised to conceptual frameworks or schemes, and there is no right way to articulate reality.¹ There have been many formulations of this. Here are a few of them:

Known objects exist as the consequences of directed operations, not because of conformity of thought or observation with something antecedent. (John Dewey, 1929, p. 191)

Objects do not classify themselves and come into experience with their tickets on them. (C. I. Lewis, 1956, p. 88)

If the real object can be known at all, it can be known only in its relation to a mind. (C. I. Lewis, 1956, p. 155)

¹See Baghramian (2004); O’Grady (2002).
Whatever we say of the world is permeated throughout with concepts of our making. (Jaakko Hintikka, 1972, p. 457)

We can have words without a world but no world without words and symbols. (Nelson Goodman, 1978, p. 6)

“Objects” do not exist independently of conceptual schemes. We cut up the world into objects when we introduce one or another scheme of description. (Hilary Putnam, 1981, p. 52)

“The world” is either the purely vacuous notion of the ineffable cause of sense and goal of intellect, or else a name for the objects that inquiry at the moment is leaving alone. (Richard Rorty, 1972)

Conceptual relativism is about the articulation of reality (cutting up or carving). Articulation is hard to define, but usually it is used to mean breaking reality up into entities and characteristics; it is the identification and classification of objects. An important question is whether reality or parts of reality can be articulated in many different ways. There are two general answers to this question: monism and pluralism.

1. According to monism, reality can be correctly articulated in only one way.
2. According to pluralism, reality can be articulated in many adequate ways.

Adequacy means that articulation is not futile, but rather reveals something that exists. Realism is usually considered to be monism, and relativism to be pluralism. According to realism, there is a reality independent of our concepts and language that includes certain kinds of objects and characteristics that define them. When the language to describe reality has been chosen, there is only one correct way to describe the structure of reality.

In conceptual pluralism, articulating reality is dependent on the conceptual frameworks used. Reality is then articulated by measuring it against the structure or network of concepts. This structure is usually called a framework or a conceptual scheme. Baghramian (2004, p. 215) categorised conceptual schemes into two groups:

(a) conceptual schemes as the principle for combining or otherwise organising the elements of our experience in different ways, and
(b) conceptual schemes as sets of basic fundamental beliefs we have about the world. They are ways of describing the world.

These groups are not exclusionary. The concept of a framework that I previously defined in Chap. 3 includes both of Baghramian’s definitions. A framework consists of (1) an epistemic point of view, (2) a conceptual system of basic concepts and categories, (3) basic beliefs and background suppositions, and (4) methods of acquiring beliefs and criteria of justification of beliefs.

There are two kinds of conceptual pluralism. Pluralism can be about how the different areas of reality have their own ways of articulating. There is no conflict (vertical pluralism) between different articulations in this case. It is also possible that some areas of reality can be articulated in many different incompatible ways (horizontal pluralism): “Horizontal pluralism is the claim that there can be more than one correct account of how things are in any given domain” (Baghramian, 2004, p. 304). In terms of conceptual relativism, it is the latter interpretation of pluralism that is relevant, and the one that I will use as my starting point for this discussion.
If we have incompatible or even just different descriptions of the structure of some area of reality, we must ask if they can be ordered by correctness: Is one articulation/description better or more apt than another? Extreme relativism denies the comparison of different descriptions and articulations or consider them to be equally good. When speaking about the world, one must always choose a certain framework, and this choice is arbitrary. Many of the supporters of conceptual relativism (Goodman, Putnam, Rorty, Quine, etc.) distance themselves from this kind of extreme relativism, which they think leads to the idea that “everything goes.” The only viable option for a conceptual relativist who rejects extreme relativism is a form of pluralism that I call conceptual viewpoint-relativism.

To use the terminology of Chap. 3, I call an epistemic question viewpoint-dependent if in order to answer it, one must refer to a point of view or a framework. The key epistemic question in conceptual relativism is the question of existence, what exists. That which exists depends on the conceptual framework used, which includes a point of view of reality: points of view are ways to organise reality.2 Claims of existence are in relation to some point of view:

\[ X \text{ exists [from point of view P]} \]

X can be an individual, a class, a characteristic, a feature, a relation, an episode, or another category of being.

In the premise that I have adopted in this book, I define conceptual viewpoint relativism as the hypothesis that there are viewpoint-dependent questions of existence. Viewpoint relativism separates itself from global relativism and extreme relativism. According to global relativism, all questions of existence are relative. Extreme relativism, meanwhile, denies the ability to compare points of view, or considers them to be equally as good. With the concept of points of view, we can formulate realism to mean the claim that questions of existence can be answered without referring to points of view.

The conceptual pluralism that Maria Baghramian defends is very similar to conceptual viewpoint relativism.3 According to it, “for many questions in the domains of metaphysics, aesthetics, ethics and even science, there could be more than one appropriate or correct answer” (2004, p. 304). Baghramian uses the idea of maps to clarify conceptual pluralism. We have different maps that can be used to describe the same area; they can all be different, but still relevant and adequate in some sense. According to her, conceptual pluralism is not relativism. Pluralism differs from relativism mostly because it considers comparing frameworks to be possible. By relativism, she is referring to what I previously called extreme relativism. According to pluralism, we can differentiate between better or worse, and more or less fruitful or productive frameworks. A person can change them and adopt new ways of thinking.

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3 Niiniluoto also calls his approach conceptual pluralism; see Niiniluoto (1987, 1999, 2014). I will return to this in the following chapter.
Frameworks can be improved upon based on a different kind of feedback. Essential, however, is that the comparison does not take place outside or above the framework. Baghramian emphasises that there is no non-perspectival approach to the world.

In their phenomenological book *Retrieving Realism* (2015, p. 154), Dreyfus and Taylor also developed a pluralism that they call *pluralistic robust realism*. Its basic feature is that reality can be approached from (or interrogated in) many different ways that reveal truths independent of us, but that cannot be combined into one non-contradictory way. This accepts the existence of a reality and the ability to be aware of it (realism), but reality is seen as being describable in many, even contradictory, ways. This is because the different ways of describing address different aspects of reality, and therefore their perceptions of reality can be seemingly contradictory.

Conceptual relativism is often criticised for denying that entities dependent on frameworks exist outside of frameworks. How can relativism, which assigns entities to a conceptual framework, explain the intuitive fact that entities have existed before we gave them definitions or constructions? For example, dinosaurs existed 100 million years ago, far before *homo sapiens* appeared on planet Earth.

This problem can be approached by applying Searle’s “reality test”:

A rough test for whether a feature is observer-independent [framework-independent, AH] is whether it could have existed if there had never been any agents in the world. (Searle, 2007, p. 82)

Based on this test, a significant number of those entities and characteristics that we refer to in our everyday language (C-language) are framework-independent. We do not doubt that the entities of C-reality, such as rocks, trees, stars, etc., have a temporal continuum and a recognised identity. This has to do with the language-game and worldview that the C-language and C-reality express. As Wittgenstein says, “if I wanted to doubt the existence of the earth long before my birth, I should have to doubt all sorts of things that stand fast for me” (1958c, § 234). In terms of conceptual relativism, this only means that C-reality is the source of our basic observations and beliefs, and doubting it could lead to a growing scepticism, without, however, discounting generally known false sensations and other cognitive distortions.

One way to resolve the framework-independent problem is to differentiate between recognising and naming an entity, and its existence. When science discovered planets, or we recognised “wandering stars” to be planets, we did not, of course, create planets. It is natural to say that planets have existed even before this. This does not, however, override the fact that it is specifically our science that defines planets as massive articles orbiting stars, and considers certain phenomenon or part to be its own entity. In another framework, a planet could be, say, a loose part of a star.

However, making a differentiation between naming and existing does not solve the framework-independent problem. The problem is not about whether an identified entity exists realistically, but which entity it is that is in question. The statement “X exists [from point of view P]” is not a statement about whether the entity that we have named “X” really exists. Rather, the statement means that an entity as we see
it from point of view P exists. Relevant questions are the entity’s conditions of sameness and the entity’s classification. On what basis should we consider two entities or two manifestations of an entity to be the same thing? On what basis do we classify entities as something? This is a question of identity and categorisation. Instead of a problem of naming, we have a problem of individuation. The function of the conceptual framework is to provide criteria or rules for identities and categorisation. As Putnam pointed out, there is no such thing as mind-independent “Self-Identifying Objects” (1981, p. 54). We cannot talk about the sameness of entities apart from a categorical system of phenomena. This problem can be precisely formulated within the theory of conceptual spaces, which I will return to at the end of the chapter.

I will now consider a simple example of categorisation: oceans (cf. Colomina-Almiñana, 2018). In modern-day geography, there are seven oceans on Earth. We consider this to be a fact, and when we talk about oceans, we are referring to exactly these seven oceans. Oceans can be compared to natural kinds. A realist may say that the seven oceans are “natural oceans” and their division follows along their “natural joints.” We can examine this from another point of view, as well. All seven oceans are a part of the same world-wide network of oceans, where they are all interconnected. From this point of view, one could say that there is only one “ocean” on Earth, extending to all continents. This can be analysed either as the concept of an ocean being conventional, or as being able to use the word “ocean” in different ways from different points of view. When the point of view has been assigned and/or the concept has been agreed upon, we can provide a precise answer to the question of how many oceans there are on Earth.

6.2 Natural Kinds and Social Constructionism

Many verbs are used for articulating reality, such as “to carve,” “to cut,” “to order” and “to slice.” I will begin with the saying to “to carve nature at its joints,” which originates from Plato. Socrates presented the two principles of dialectics in Plato’s dialogue, Phaedrus (265, d, e):

• First, the comprehension of scattered particulars in one idea. (Synthesis).
• The second principle is that of division into species according to natural formation, where the joint is, not breaking any part as a bad carver might. (Analysis).

After presenting these, Socrates stated that “I am myself a great lover of these processes of division and generalization; they help me to speak and to think” (Phaedrus, 266 b).

The theme of carving-up reality has to do with the discussion on natural kinds, which can include such things as biological species or types of rock. A fundamental question is whether there are natural ways in which to classify things. This kind of natural classification would correspond to groupings made based on the structure of
the world.\textsuperscript{4} One can approach the theory of natural kinds by relying on the so-called problem of universals, according to which there are three approaches to natural kinds (cf. Gärdenfors, 2000, p. 110; Douven & Gärdenfors, Forthcoming):

- According to \textit{universalism}, there are natural kinds which reflect \textit{natural divisions} in a mind-independent reality. (See Tahko, 2015)
- According to \textit{conceptualism}, there are classes of entities, but they are not mind-independent; they are dependent on conceptual schemes.
- According to \textit{nominalism}, there are no classes at all, and all classification is just to give a common name to some entities. Classifications are arbitrary.

Conceptual relativism does not accept universalism, but also does not accept nominalism, so it is closest to conceptualism. Universalism claims that a correct classification exists. It is realism. Nominalism, meanwhile, leads to all classifications being as good or as bad, and therefore completely arbitrary. And conceptualism admits that some of the carvings-up of the world are better than others, in terms of practical applications of classification, for example.

According to pragmatism, the goals set for action affect how reality is processed and selected. Dewey stated this very clearly in his book \textit{Reconstruction in Philosophy}:

To have an aim is to limit, select, concentrate, group. Thus a basis is furnished for selecting and organizing things according as their ways of acting are related to carrying forward pursuit. Cherry trees will be differently grouped by woodworkers, orchardists, artists, scientists and merry-makers. To the execution of different purposes different ways of acting and reacting on the part of trees are important. Each classification may be equally sound when the difference of ends is borne in mind. (1920, p. 153)

But then, Dewey set certain objective criteria for the superiority of classifications:

One will further the cabinetmaker in reaching his end while another will hamper him. One classification will assist the botanist in carrying on fruitfully in his work of inquiry, and another will retard and confuse him... The necessity of execution supplies objective criteria. Things have to be sorted out and arranged so that their grouping will promote successful action for ends. Convenience, economy and efficacy are the bases of classification, but these things are not restricted to verbal communication with others nor to inner consciousness; they concern objective action. They must take effect in the world. (1920, pp. 153–154)

The superiority of classifications is not based on their rightness within realism, but on their usefulness.

The question of essence also has a place in this discussion. According to essentialism, a natural kind attains or corresponds to the nature of beings, separating it from different kinds of entities. Tuomas Tahko (2015, p. 796) defines natural kind essentialism in the following way:

There are at least some genuine, mind-independent natural kinds that are defined by their essential properties.

Essential properties determine when two members of the same class are the same kind. Conceptualism rejects essentialism: Many kinds of classifications are possible. The sameness relation is not absolute, but it is exactly this that is dependent on the conceptual framework.

Classifications are different. When we scientifically classify, for example, biological species or chemicals, we use the objective (naturalistic) characteristics and microstructures of the entities (see Tahko, 2015). On the other hand, when we group things based on different interests, the connection to objective characteristics is more indirect.

According to social constructionism, (social) reality is socially (or culturally) constructed. This can mean a great many things, but according to Ian Hacking (1999, pp. 6–7), the social constructionists tend to hold that if X is socially constructed, then X is not self-evident, inevitable, or determined by the nature of things. For example, the institute of marriage is socially constructed and accordingly, we could consider whether monogamy, for example, is self-evident or inevitable. Although social constructionism is a general theory about the social construction of reality, it has barely any supporters within the fields of natural sciences (cf. Giere, 2006). Instead, it does maintain a strong position within the fields of science studies, social studies and humanities. The reality that social sciences is concerned with is significantly constructed on how different phenomena are interpreted and what status they are assigned in a culture. Such central concepts as marriage, democracy, citizens, citizenship, poverty, nationalism, justice, gender, otherness, work, power and state are all concepts that constitute reality (Harding, 2015, pp. 52–79). They are always about power and the question of who can define them.

We should assess how social constructionism fits in relation to the previously presented division between universalism, conceptualism and nominalism. Social constructionism rejects universalism because it emphasises the cultural nature of constructions such as gender, identity and marriage. It is anti-realism and anti-naturalism. Many of the critics of social constructionism seem to think that it is nominalism; that all constructions are arbitrary. However, the proponents of social constructionism do not consider all classifications to be as good.

I will now consider the problem of social constructionism from the point of view of Searle’s (1995, 2007) social ontology. According to Searle, for social institutions to exist, they need constitutive rules. These rules have the form “X counts as Y” or “X counts as Y in context C.” For example, a certain person who meets certain qualifications counts as the president of the United States (Searle, 2007, p. 88). This kind of rule imposes a certain status and function to a person or an institution.

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5 Social constructionism is a general theory about the construction of reality, but here I will only focus on its use in social and cultural research (cf. Fuller, 2006; Hacking, 1999; Pulkkinen, 1996).

6 My impression is that social constructionism is mainly devoted to societies and cultures, not to nature.

7 Hacking denies that Searle represents social constructionism. I consider Searle’s book The Construction of Social Reality to be the analysis of in what sense society is constructed, and in what sense it is not.
Language is intimately embedded to these rules. When X counts as Y, Y is not an intrinsic property of X; instead, the new status of X exists “only insofar as they are represented as existing” (p. 94). For that, we need language and names: “The Y term just is the X term represented in a certain way” (p. 94). For example, a person is called “president,” or a certain institution “marriage.” It seems that social facts here are constructed by language. In fact, language functions as a tool for representing constitutive rules and statuses. The bind is so strong that the new terms and concepts belong to the constitutive rules as integral parts. This means that institutions and social facts are ontologically mind-dependent. So far, so good.

On the other hand, Searle was not willing to draw relativistic conclusions from his social ontology, although his view that constitutive rules are “representation-dependent features of the world and therefore do require the existence of representations as part of the conditions of their normal intelligibility” (1995, p. 193) would give way to relativism. Searle’s intention is to give social ontology a status comparable to general realism: “How do we construct an objective social reality?” (p. xii). This objectivism hinders him from seeing the strong plurality of social construction.8

We can approach the relativism of social constructionism by applying hermeneutics to it, which is first and foremost a theory of understanding (see Gadamer, 1992). Although hermeneutics is principally about the interpretation of texts, it has a broader dimension to do with rationality and language use. Understanding is linguistic understanding and interpreting. It is the trinomial relation “x understands y as z.” Z here refers to a concept that gives meaning to y. For example, x can understand a strike y as the political event z. This is x’s point of view of y, z being the aspect. Through interpretation, we construct new meaning structures (concepts) over reality by adopting new points of view about societal reality. Societal points of view are often expressed by using a new concept to describe the aspect that is highlighted by the point of view. Things can seem very different depending on which concept we use of them. If we consider a refugee to be a foreigner fleeing persecution, we consider it to be something completely different than if we consider the refugee to be pursuing a higher standard of living. In this sense, language creates or constitutes reality. Society is not stable: It is open to many different interpretations. The stronger status certain interpretations and meanings achieve in society, the more they change the social reality and create new “social facts.”

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8 It should be noted that although the fields of the philosophy of science and science studies have discussed the concept of social constructionism a lot (see Giere, 2006; Fuller, 2006), it is not widely used in epistemological discussions on relativism. For example, in her encompassing work, Relativism (2004), Baghramian does not mention social constructionism or refer to Berger and Luckmann’s classical work, The Social Construction of Reality (1967). O’Grady (2002) and Mosteller (2008) also do not refer to social constructionism.
6.3 Internal and External Realisms

Hilary Putnam has been one of the most significant defenders of conceptual relativism since the 80s. Putnam criticised “metaphysical realism,” offering what he called “internal realism” as a counterbalance to it. Metaphysical realism is a perspective that assumes that a fixed group of objects independent of language exists and that there is a fixed relationship between terms and their references. In his book *Reason, Truth and History*, Putnam describes metaphysical realism in the following way:

The world consists of some fixed totality of mind-independent objects. There is exactly one true and complete description of “the way the world is.” Truth involves some sort of correspondence relation between words or thought-signs and external things and sets of things. (1981, p. 49)

Metaphysical realism adopts an external perspective—that of God’s—of the world. Although Putnam softened his theses in his later writings, he continued to criticise metaphysical realism, which claims that the world could be divided into objects and characteristics in precisely one way. Putnam consistently rejected this kind of metaphysical realism in all of his later works.9

According to the perspective of internal realism, “what objects does the world consist of? is a question that it only makes sense to ask within a theory or description” (Putnam, 1981, p. 49). According to internal realism, there can be many “true” theories or descriptions of the world. This makes room for pluralism. Instead of the point of view of God, only “the various points of view of actual persons reflecting various interests and purposes that their descriptions and theories subserve” exist (p. 50). The term “internal” comes from the objects gaining their existence from the conceptual scheme that is used:

“Objects” do not exist independently of conceptual schemes. We cut up the world into objects when we introduce one or another scheme of description. (p. 52)

Pluralism wouldn’t be problematic as such if these descriptions took place in different points of view. Pluralism becomes challenging if it is possible that there are conceptual schemes that are as consistent, but incompatible with each other, and correspond equally to our experiences (see Putnam, 1981, p. 73). This is a question of conceptual relativity.

In his book *Ethics without Ontology* (2004), Putnam differentiates between conceptual relativity and conceptual pluralism. Conceptual pluralism takes place in a situation where we have two different descriptions for a certain phenomenon. Putnam used describing a room as his example of this. One description uses common concepts such as chair, table, book, etc. The other description of the same room can refer to particles and fields. These descriptions are not incompatible or even contradictory.

9Putnam reiterates this critique in his last work; see Putnam (2015).
That we can use both of these schemes without being required to reduce one or both of them to some single fundamental and universal ontology is the doctrine of pluralism. (Putnam, 1988, pp. 48–49)

In his earlier works (see Putnam, 1988), Putnam called conceptual pluralism conceptual relativism, but in this one, he clarifies what he means by conceptual relativism.

In conceptual relativity, the question of the existence and identity of entities is a relative question (see Putnam, 2004, pp. 33–51). According to Putnam, an essential question for ontology is how the word “existence” is used. It can be used in many different ways, and these ways are dependent on what agreements (conventions) have been made in a language. This means that such central ontological concepts as an individual and identity are relative to the conventions of language. Putnam’s famous example is that of mereology, the theory of parts and wholes.

According to mereology, the combinations or sums of objects are also objects. If we have three “basic objects” x, y and z, then we have seven mereological objects: x, y, z, x + y, x + z, y + z and x + y + z. Whether mereological sum objects are really objects is a pointless question, according to Putnam. That is completely dependent on the agreements that have been made. A mereological “dispute” is not semantic; it is not a question of giving a different meaning to the word “existence.” It is rather a question of how the words are used. The disputes that conceptual relativity highlights, such as “There are three objects” vs. “There are seven objects,” are apparent. They disappear when we notice the different conventions behind them. There is no correct answer to the question of how many objects exist in that world.

We can imagine that we have two different languages, one where mereological sums are not accepted as objects (L1), and another where they are accepted (L2). In a given situation, the statement “There are three objects” is true when presented in language L1, but untrue when presented in language L2. What is essential in Putnam’s analysis is that the statements “There are three objects” and “There are seven objects” are not contradictory, because they are based on different conventions. They may seem contradictory, but in reality, they are not. Instead, the conventions are incompatible with each other in the sense that if we were to discuss the objects in both languages L1 and L2 at the same time, we would have misunderstandings and arrive at a stalemate. We must decide which language is used at a given time. The same analysis could be made of statements of identity. Similarity is conventional. Identity is constructed from the similarities of entities, and similarity is not an absolute viewpoint-independent characteristic of the world.

We can delve deeper into the problematics of relativism by separating optional or alternative languages from the common language. Previously, I have used the term

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10 Putnam avoids using the term “conceptual relativism” in the context of his own theory.

11 Jaakko Hintikka offers an interesting differentiation between two kinds of identifications. A perspectival identification takes place from the perspective and context of the speaker. A public identification is perspective-free. In Hintikka’s semantics, these include the different identifications of the entities between possible worlds. See Hintikka (1998). I would like to thank Niiniluoto for this observation.
C-language to refer to common language. The expressions and meanings of C-language determine our everyday ontology. The shared beliefs of C-language are the basis for our common conception of reality, which I have called C-reality. Optional languages are the expansions of C-language for a certain area of knowledge. Such expansions could be the set theory used by mathematicians, which does not accept mereological sums as objects (i.e. groups), or a mereological language, where sums are objects. Descriptions of the world are compatible in conceptual pluralism, while they are incompatible in conceptual relativity:

Conceptual relativity always involves descriptions which are cognitively equivalent (in the sense that any phenomena whose explanation can be given in one of the optional languages involved has a corresponding explanation in the other) but which are incompatible if taken at face value. (Putnam, 2004, p. 48)

To sum this up, we have cognitively equivalent optional languages (descriptions) that cannot be combined in conceptual relativity, while we have compatible optional languages (descriptions) in conceptual pluralism. Putnam views metaphysical realism negatively:

The whole idea that the world dictates a unique “true” way of dividing the world into objects, situations, properties, etc. is a piece of philosophical parochialism. (Putnam, 2004, p. 51)

The developer of logical empiricism, Rudolf Carnap, approached the problem of optional languages in almost the same way as Putnam did. According to Carnap, new kinds of entities are introduced by new frameworks:

The acceptance of a new kind of entities is represented in the language by the introduction of a framework of new forms of expressions to be used according to a new set of rules. (1980, p. 36)

Carnap calls this procedure “the construction of a linguistic framework for the new entities in question” (p. 29). It is natural to ask whether entities exist. According to Carnap, we can ask this in two ways: as an internal or an external question. An internal question is a question of the existence of certain entities of the new kind within the framework. One such question is whether atoms exist within the system of physics (they do). An external question is a question of the existence or reality of the system of entities as a whole. An internal question can be answered; the answer can even be analytic, like the number theory, which refers to numbers. Internal questions of existence can be answered with true/untrue/unknown answers. Meanwhile, an external question is a philosophical or a “realistic” question of whether the system postulated by a linguistic framework is real, independent of the framework. According to Carnap (p. 38), this cannot be answered with a true/untrue answer. The important question is why we should accept or use a conceptual framework. Because “truth” does not answer this, the choice should be based on the fruitfulness, usefulness or appropriateness of the framework, to the practical needs. Carnap closely approaches pragmatism and John Dewey’s previously mentioned conceptions in this.
Whether it is a question of Carnap’s linguistic frameworks or Putnam’s optional languages, what is essential is linguistic tolerance. The same phenomena can be described using alternative frameworks that can be compared for their usefulness. To use Carnap’s words (p. 44), the choice can be made based on how efficient they are as tools: What is the ratio of the result achieved to the amount and complexity of the efforts needed? We must still answer the question of how Putnam’s and Carnap’s ideas about the “freedom” of articulating reality relate to ontological realism. John Searle has asked this question in a straightforward way.

In his book The Construction of Social Reality (1995), Searle claims that conceptual relativity or relativism is completely compatible with realism. Realism means to Searle that the world (or reality or the universe) exists regardless of how we present (represent) it. Conceptual relativity means that in order to describe reality, we can use different languages and conceptual systems, and that these are conventional ways of representing reality. Searle (1995, p. 161) sets the “external realism” (ER) that he supports parallel to “conceptual relativism” (CR):

ER: Reality exists independently of our representations of it.
CR: All representations of reality are made relative to some more or less arbitrarily selected set of concepts.

Searle presents the thesis slightly more broadly in the following way:

Systems of representation, such as vocabularies and conceptual schemes, are human creation, and to that extent arbitrary. It is possible to have any number of different systems of representations for representing the same reality. (p. 151)

Searle also describes these theses using the concepts of an aspect and a point of view (pp. 175–176). Each representation represents a certain aspect. The representations have an aspectual character because a representation always occurs within a framework and from a certain point of view. Representing the same drop of water as water and as H2O is presenting its two aspects. Searle sums up his views in the following way:

Strictly speaking, there is an indefinitely large number of points of view, different aspects, and different conceptual systems under which anything can be presented…. In short, it is only from a point of view that we represent reality, but ontologically objective reality does not have a point of view. (p. 176)

As Searle states, these theses, ER and CR, are not contradictory in any way. A realist could very well accept conceptual relativism and deny that a privileged way to describe reality exists. For example, it not again realism that weight could be measured in terms of pounds and kilograms: “that I weigh 160 in pounds is consistent with the claim that I weight 73 in kilograms” (p. 165). Pointing to internal realism, Searle stated that it is a common mistake “to suppose that realism is committed to the theory that there is one best vocabulary for describing reality, that reality itself must determine how it should be described” (p. 155). If his criticism is correct, one could ask what remains of internal realism, aside from rejecting the privileged conceptual scheme (p. 164).
However, Searle’s analysis is inadequate in many ways. Maria Baghramian claims that Searle trivialises conceptual pluralism by concentrating on cases (e.g., different units of measurement) that do not have any real conflict with the different ways of describing the world.

The issue at stake is not the surface differences about units of measurement; rather it concerns fundamental ontological commitments, incompatible methods of classification, cognitive values and priorities. (2004, p. 309)

Another observation is about Searle’s concept of truth. That the same statement could be true in one scheme and untrue in another does not contradict with realism, according to Searle. Instead, Searle considers facts to belong to reality and to be independent of our conceptions. Conceptual schemes provide rules to fix the meaning of the terms of a scheme. Schemes assign certain “representation-independent” features of the world to the terms that unequivocally determine which statements are true (p. 166). Therefore, when a framework is assigned, truth is absolute.12

Putnam and Searle’s disagreement is ultimately on the concept of absolute truth, rather than whether reality can be cut up into pieces in one or more ways. If, by ontology, we mean what exists from a certain point of view or according to a certain framework (or scheme), then we can present the relationship between ontology, the framework and reality with a formula:

\[
\text{Ontology} = \text{Function} (\text{Framework}, \text{Reality})
\]

Ontology depends on both the features of reality and the frameworks used.13 Searle’s external reality thesis ER means that in this formula, reality is mind-independent or framework-independent. This is easy to accept. Instead, ontology is not framework-independent, as the classifications depend on what framework is used. But of course, it is true that ontology also depends on reality, as classification is directed at the world. The real difference between Searle and Putnam is that according to Searle, reality determines the truth of statements, while according to Putnam, truth is related to framework-dependent ontology. Searle appeals to the metaphysical concept of truth here, to use Putnam’s terms, where truth is a radically non-epistemic relation of correspondence between language and the reality that is totally mind-independent (cf. Searle, 1995, p. 209). In internal realism, the truth is an internal relation dependent on the framework: the truth is fitting the world as articulated by the framework (cf. Putnam, 1981, pp. 49–56). The concept of truth is epistemic at least in the sense that reference to the world is framework-dependent (see Putnam, 1978).14

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13 The relationship between framework-reality has been described using the concepts of Kantian scheme and content, with the thought that the scheme provides a shape and structure to a material that is considered to be the content (Baghramian, 2004, pp. 214–218).
14 However, because Putnam rejected the epistemic concept of truth in his later work and started supporting a “metaphysical” concept of truth (truth is not warranted assertability under ideal conditions, Putnam, 2015), even the last differences between internal realism and Searle’s external realism disappears.
The Putnam–Searle-controversy could be reduced to different interpretations of “ontologically objective reality.” According to Searle’s external realism, “ontologically objective reality does not have a point of view” (p. 176). This means that reality exists totally independent of our points of view. However, reality is a void concept because whenever we say something about the world, we use the categories of some framework. Reality outside our frameworks is just bare existence without any entities and characteristics. According to internal realism, objects do not exist independently of conceptual frameworks or points of view. The idea of an unconceptualised world is incoherent; reality is an epistemic concept. Objects are identified (or generated) only by using certain criteria of sameness. This intuition is adequately captured in the theory of conceptual space.

6.4 Conceptual Spaces and Conceptual Relativism

So far, the discussion on the role of conceptual frameworks and points of view in the carving-up of the reality is concentrated more on principles than on how the carving-up is taking place. The theory of conceptual spaces (see Gärdenfors, 2000; Hautamäki, 1986, 2015, 2016; Kaipainen & Hautamäki, 2011) provides a workable model to analyse the conceptualisation of reality, the central topic of conceptual relativism.

Conceptual spaces are multidimensional representations of reality. This approach differs considerably from the two dominating paradigms of knowledge representation: symbolism (e.g. logic) and associationism (e.g. neural networks). My experience is that if we take conceptual spaces to be frameworks for cutting-up a reality, we will better understand how the reality is articulated and constructed. We will especially have effective tools for the identification and categorisation of objects.

The fundamental idea of conceptual spaces is that of quality dimensions. A quality dimension is an aspect of an object in respect to which they could differ. Examples of quality dimensions are colour, shape, taste and weight. One could identify dimensions by observing that objects that differ from each other in one dimension, say by colour, can be similar in other dimensions. As far as I know, the idea of quality dimensions goes back to W. E. Johnson, who in his book *Logic* (1964) launched the concept of determinables. Johnson presented the concept of determinables in the context of the traditional logical division of a class into disjointed sub-classes. In classical logic, this division must be based on some principle of “fundamentum divisionis.” Johnson proposed that fundamentum divisionis are determinables. Johnson’s definition of determinables is the following:

I propose to call such terms as colour and shape determinables in relations to such terms as red and circular which will be called determinates. (Johnson, 1964, Part I, p. 174)

A determinable is something that could be further specified, and this specification gives determinate values. The set of values for a quality dimension is called its
domain. The values in a domain are mutually exclusive, so that every entity has only one value in the domain. So an entity that is red is not blue or yellow, etc., but it might be round or whatever, depending on its values in other quality dimensions. Domains can be discrete or continuous, and could have a certain structure. Johnson’s determinables are linguistic, but in the theory of conceptual space, determinables are first and foremost cognitive structures that represent qualities of experience and perception.15 Meanwhile, in science, abstract theoretical quality dimensions (like in 3D Euclidean space) are also used (see Gärdenfors, 2000, pp. 8–9).

Gärdenfors (2000) defined a conceptual space to be a collection of one or more domains. This can be defined formally as follows (cf. Hautamäki, 1986, 1992, 2016). A quality dimension is a couple <Q,D>, where Q is a quality (or variable) and D is a domain of values for Q. The determinable “colour” might be specified as follows:

\[ Q = \text{colour}; D = \{\text{red}, \text{blue}, \text{yellow}\}. \]

Let us suppose that we have n quality dimensions: <Q₁, D₁>, …, <Qₙ, Dₙ>. A conceptual space CS is the product of the sets D₁,…,Dₙ, that is CS = D₁x…xDₙ. CS is relevant for an object x if there is a vector <d₁,…,dₙ> in CS, where each coordinate dᵢ expresses the value of the quality Qᵢ for x. Then we can say that the point <d₁,…,dₙ> represents x in the conceptual space CS and it is denoted by R(x). For example, the colour of x is red, the shape is round, the weight is 10.5 kg etc.

We have not yet said anything about concepts. As compared to properties, which are based on one dimension, concepts are based on several domains. Concepts are normally referred to by nouns like “apple,” “cat,” and “star.” A concept, like F, in a conceptual space CS is simply its subset:

\[ F \subseteq \text{CS}. \]

The concept F applies to an object x if and only if x’s representation R(x) belongs to F:

\[ R(x) \in F. \]

Let us consider the concept of an apple. To characterise an apple, we need several dimensions, such as,

- Colour: green, red, yellow, pink, russet
- Taste: sweet, acidic
- Flesh: pale yellowish-white, pink, yellow
- Diameter: 4.0–8.3 cm
- Etc.

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15 Charro and Colomina (2013) assume that “the physical world has a determinate/determinable structure,” cf. also the metaphysical theory of points of view in Colomina-Almiñana (2018).
One advantage of this way of defining concepts is that it allows us to invent correlations between qualities. In this case, one correlation is that green apples are acidic. Conceptual spaces provide an easy way to define subconcepts: They are just subsets of major concepts. In subconcepts, the conditions posed by domains are tighter, for example, taste is sweet, and acidic apples are not allowed. Some well-known sub-species of apple are Fuji, Golden delicious, Granny Smith, and Lobo.

All concepts generate a classification of entities. Let F be a concept in the space CS and E a set of entities. Then the set of entities in E whose representations belong to F forms an F-class defined as follows (Fig. 6.1),

\[ x \in F \text{-class if and only if } R(x) \in F. \]

The idea of space can be further developed by following Gärdenfors’ (2000) approach. He introduces a geometry into conceptual spaces by considering quality dimensions to be endowed with certain topological or geometric structures. Firstly, the domains of quality dimensions might contain similarity relations which express how similar values (points) in a domain are. With similarity relations, domains can be partitioned into similarity classes (regions), where all points in a class are more similar to each than to points in another class.\(^{16}\) This provides many possibilities to study concepts and conceptual structures in cognitive science, psychology, semantics, the philosophy of science etc. (see Gärdenfors, 2000; Zenker & Gärdenfors, 2015; Kaipainen & Hautamäki, 2015).

One important application of the geometry of conceptual spaces is to try to define which properties (qualities like blue) are “natural.” It’s quite clear that not all properties are natural, a famous example being the property “grue” that Goodman presented. An object is grue if and only it is observed before \(t\) and is green, or else is

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\(^{16}\)Gärdenfors (2000, p. 24) treats colour as a three-dimensional continuous domain, where the dimensions of hue, chromaticness, and brightness are integral in the sense that one cannot assign an object a value in one dimension without giving it a value in the other. In my presentation, I suppose that all domains are separate, like colour and shape are separate, and integral dimensions are integrated into one multi-dimensional domain.
not so observed and is blue. This kind of artificial property is not “projectible” in inductive inference. Gärdenfors (2000, p. 71) defines the concept of natural\textsuperscript{17} property as follows (criterion P):

Criterion P: \textit{A natural property} is a convex region of a domain in a conceptual space.

It is supposed that the relation \textit{between} is defined in the domain. A region is a subset of a domain. That a region is \textit{convex} means that if there are objects that are located at $x_1$ and $x_2$ on the domain, both examples of a property $F$ (say red or round), then any object that is located \textit{between} $x_1$ and $x_2$ on the domain is also an example of $F$. If $F$ is convex, there are no gaps in it. Natural properties (regions) in a colour (or shape) domain represent the different colours (or shapes). Gärdenfors gives impressive arguments for the criterion P. It generates a great number of empirical predictions and it supports a principle of cognitive economy (memory, learning, etc.).

It seems clear that quality dimensions for different sets of entities (or different fields of the world) are different. Let us say that a quality dimension is \textit{relevant} for a set $E$ of entities, if its members have that quality, such as colour. The set of relevant quality dimensions for $E$ is called \textit{ontospace} by Kaipainen and Hautamäki (2011, 2015). One case is that ontospaces are representations of C-reality. In practice, people are not working with the whole ontospace, because there might be too many quality dimensions. People are selective, and this is the core of conceptual points of view.

In my study \textit{Points of View and their Logical Analysis} (1986), I defined a \textit{point of view} to be a set of quality dimensions (determinables). The idea is that a point of view is the set of relevant qualities used to describe objects. If a point of view includes the quality of colour, then colour is one of the qualities of objects the point of view recognises or notifies. The quality dimensions not included in a point of view are ignored. This has important consequences concerning relative identity. If $P$ is a point of view, then we say that $x$ is \textit{identical} with $y$ relative to $P$ if and only if $x$ and $y$ are similar (or identical) in respect to all quality dimensions in $P$.\textsuperscript{18} Still, $x$ and $y$ might differ in respect to some other quality dimensions. So relative identity does not imply ontological (absolute) identity (cf. Geach, 1973). Relative identity generates a partition into the set $E$ of entities. By identifying objects that are identical relative to $P$, we arrived at a new \textit{ontology} (see Hautamäki, 1986, 2016).\textsuperscript{19} In this ontology, entities are “produced” by a point of view, and qualities are prior to identity.

Above, I have presented the criterion P for natural properties. But is there a similar criterion for natural concepts? Gärdenfors (2000) states that there is, and proposes the criterion C. To understand it, we must recognise the context dependency

\textsuperscript{17}“Natural” does not mean naturalistic, but non-artificial.

\textsuperscript{18}Decock and Douven (2015) defined relative identity by applying the metrics of domains. In their definition, identity means high-similarity in all relevant domains.

\textsuperscript{19}This kind of ontology resembles the so-called cluster theory of individuals, according to which objects are a cluster or bundle of properties.
of a concept. The salience of different domains varies in different contexts: If one appreciates only sweet apples, then the taste quality is salient. Technically, the salience can be presented by assigning weights to dimensions. The salience is often dependent on users’ perspectives when using a concept. “Taking a particular perspective means giving some domain particular attention” (p. 194). Taking this into consideration, Kaipainen and Hautamäki (2011, 2015) define perspective (or point of view) to be a selection of quality dimensions (domains) together, a weight assigned to each. Similarity and categorisation of objects is sensitive to perspectives.\footnote{In Kaipainen and Hautamäki (2011, 2015), the concept of representation space is introduced; it is a lower-dimensional space, where categorisation of ontospace is represented and studied. Representation space is dependent on perspectives.}

The information about correlations between qualities is also relevant to concepts. Taking this into consideration, a natural concept is defined as follows (Gärdenfors, 2000, p. 105):

Criterion C: A natural concept is represented as a set of regions in a number of domains together with an assignment of salience weights to the domains and information about how the regions in different domains are correlated.

The convexity is not mentioned in the criterion C, but may be added (see Zenker & Gärdenfors, 2015, p. 6; Douven & Gärdenfors, Forthcoming).\footnote{Personally, I do not see that convexity should be a part of criterion C. There are so many useful concepts without convexity, especially in science, that the convexity requirement restricts the scope of applications of conceptual space theory too much.} Criterion C is not essentialist:

In criterion C, the distinction between essential and core properties is not assumed. I believe that a theory of concepts can do without it. First of all, the present theory is conceptualistic. Human categorizations are based on how we represent things mentally, not on what ultimate physical properties they have. (Gärdenfors, 2000, p. 106)

Gärdenfors also considers the possible relativism of conceptual spaces. He notes that some quality dimensions are innate, and that we have a limited freedom to choose a conceptual space because it has an evolutionary basis (p. 82). This concerns the subjective or cognitive conceptual space. But he recognises that relativism “applies to the more advanced learned and culturally dependent quality dimensions” (p. 82). I interpret this explanation to mean that basic quality dimensions are so firmly bonded to our experience, ecological conditions, our senses, and our brain structure, that they are practically fixed. But in science, new abstract quality dimensions are introduced as parts of theories, and there are no such practical limitation or constraints. Even if we accept that there are “natural” quality dimensions, still in concept formation, the dimensions included in concepts can be freely selected dependent on interests and points view (cf. Douven & Gärdenfors, Forthcoming). Categorisation by concepts can be done in many different ways, thus again confirming conceptual relativism.
One unanswered problem in the theory of conceptual spaces is their ontological status (see Gärdenfors, 2000). Domains with a similarity structure are used to represent qualities, not to describe them. Therefore, they seem to be cognitively real. On the other hand, Gärdenfors views conceptual spaces as theoretical entities that can be used to explain and predict various empirical phenomena concerning concept formation (p. 31). He likes to avoid questions about how real the dimensions of conceptual spaces are, and takes them to be just instruments for predicative and constructive purposes. My interpretation is that quality dimensions are theoretical constructions of qualities based on their perception in human cognition; they model the perception of qualities.

I think that the concept of points of view presented above (a set of quality dimensions) fits nicely with the general notion of points of view as defined in Chap. 3: quality dimensions that form a point of view specify aspects selected to represent objects. So, if my point of view contains the qualities of colour and shape, then these aspects represent objects to me. Although not all aspects are these kinds of qualities (determinables), there is strong evidence that quite many aspects are qualities (see Hautamäki, 1986; Gärdenfors, 2000; Zenker & Gärdenfors, 2015). It is especially interesting that almost all theories could be formalised by using conceptual spaces. Note also that qualities attached to a point of view need not be physical (or phenomenal), they might be also social or personal.

The criteria P and C for the naturalness of properties and concepts seem to be necessary conditions for epistemic systems. They offer a demarcation line between concepts that are natural and those that are artificial. Non-convex concepts with caps or jumps are “strange.” But it is clear that these criteria are not enough to build optimal conceptual systems. Douven and Gärdenfors (Forthcoming) propose some new principles for optimally designed cognitive systems. These are parsimony, informativeness, representation, contrast and learnability. These principles render a conceptual system (space) non-arbitrary, but also allow for differences among conceptual systems used in different cultures. In Hautamäki (1986, pp. 23–28), I also presented some criteria of good design, one of them being the adequacy condition. A conceptual space CS is adequate for a set E of entities, R being the representation function, if R(x) = R(y) implies x = y. Then all entities in E are identifiable by quality dimensions of CS. In Kaipainen and Hautamäki (2019), we present a dynamic model of conceptualisation where dimensions are activated and evaluated during the process of categorisation. Operations in conceptualisation include searching for new dimensions, dropping, integrating and ordering dimensions, testing adequacy of dimensions to sets of entities, etc.

By developing conceptual spaces along the lines of optimal design, including adequacy and dynamic procedures, we have a workable method to study conceptual relativism. First of all, in the theory of conceptual spaces such central notions of conceptual relativism as conceptual frameworks, points of view, and the identification and categorisation of objects could be defined in an exact manner. This gives new possibilities to defend and to develop conceptual relativism.

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22 This refers to the semantic or structuralist concept of theories. I will say more about it in the next chapter.
Chapter 7
Relativism and Realism in the Philosophy of Science

Abstract  The philosophy of science is an important field of philosophy, where relativism and realism meet. The philosophy of science studies the nature of scientific knowledge, general justifications and scientific activity. Many of the things I have discussed in the previous chapters are also relevant for the philosophy of science. Scientific realism has been one of the most significant movements in the philosophy of science. However, its problems have paved the way for perspectivism, according to which perspectives (points of view) are a part of all scientific activity, from observations to theoretical assumptions. I will show that scientific realism could not be defended using a Tarskian semantical conception of truth. The objectivity of science is a controversial issue that especially researchers who study gender and postcolonial studies have paid attention to. They propose to replace the “normal” concept of objectivity with the concept of strong objectivity, which is pluralistic.

7.1 Problems with Scientific Realism

Scientific realism is one of the main trends in the philosophy of science, along with empiricism and instrumentalism. Scientific realism considers theories to be descriptions of reality that can either be true or untrue. According to empiricism (or inductivism), science is based on observations and experiences, and the inductive generalisations made from them. Instrumentalism, meanwhile, considers scientific theories to be useful instruments in predicting phenomena. The dispute between realism and instrumentalism has been one of the main disputes in the philosophy of science for a long time.

Scientific realism makes two significant commitments:

• the semantic commitment: the statements that the theory makes are either true or false, depending on whether the entities talked about in the theory exist and whether they are correctly described by the theory;
• the metaphysical commitment: the entities described by the true scientific theory exist objectively and are independent of mind.
Philosopher of science Bas van Fraassen characterised scientific realism in the following way: “Science aims to give us, in its theories, a literally true story of what the world is like; and acceptance of a scientific theory involves the belief that it is true” (1980, p. 8).

Nobel Prize winner Sheldon Glashow provided a strong formulation of scientific realism in his statement that “we [scientists, AH] affirm that there is eternal, objective, extra-historical, socially neutral, external and universal truth” (see Giere, 2006, p. 10). First of all, scientific realists accept the realistic theory of knowledge, according to which a mind-independent reality that decides which statements are true exists.

According to instrumentalism, theories are tools for ordering, explaining and predicting phenomena (often data). They are not meant to provide a realistic view of the world. The question of the existence of unobservable entities is not relevant in terms of the usefulness of theories or the ability to predict phenomena. Instrumentalism is often considered to be anti-realism and relativism, but in principle, instrumentalism is compatible with realism.

New themes and approaches that are critical to traditional realism have been introduced to the discussion in the philosophy of science at the end of the twentieth century and at the beginning of the twenty-first century. Common to these is the acceptance of pluralism and perspectivism and reassessing scientific realism. In this section, I will examine two ways to defend scientific realism. One is about the success of scientific theories, and the other about reviving the correspondence theory with the help of the semantic theory of truth.

### 7.1.1 Miracle Argument and Scientific Realism

A significant argument in the realism/anti-realism dispute is the success of scientific theories. The truth of a theory means, according to realism, that the theoretical entities it refers do exist. Theories include concepts such as axions and gravitational waves that do not directly refer to observable objects. Many of these theories that assume theoretical entities have successfully explained observable phenomena or helped to create useful technologies. For example, humans have made it to the moon by relying on physics and the technology based on it. If our theories were not true, then this success could not be explained; it would be a “miracle.” This so-called miracle argument is an inference to the best explanation: The best explanation for the success of a theory is its truth and especially that the entities postulated by the theory actually exist. According to scientific realism, the objective of science must be to arrive at true theories; a mere empirical ability to explain is not sufficient.\(^1\)

We do not necessarily require “truth” in terms of realism for theories to have an empirical power to explain, or for us to be able to successfully act using our theories (see Okasha, 2002). As experience has shown, theories that have been proved to be untrue have also worked well. For example, the wave theory of light, based on the ether theory, predicted some new optical phenomena well. According to the ether

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\(^1\)For a debate on the subject, see Chakravartty and van Fraassen (2018).
theory, a special transmission medium is needed for the propagation that was seen to be necessary for the transmission of electromagnetic forces. Einstein rejected the concept of a substantial ether in his theory of relativity. Another example of a “disappeared” entity is phlogiston. The phlogiston theory was a seventeenth and eighteenth-century chemical theory that assumed that when an object burns, it releases a substance called “phlogiston” into the atmosphere. Modern chemistry shows that burning occurs when things react with oxygen in the air. Both cases pose the question of why our present theories should be better than these older and rejected ones.

There must be other explanations for the success of the theories than their claimed truthfulness in terms of realism. Of course, the success of incorrect theories working could also be explained by them being approximately true or near to true (truthlikeness) (see Niiniluoto, 1987). However, this waters down the idea that the entities postulated by true theories actually exist, and that that is why we succeed. I will not deny that the miracle argument is intuitively appealing, but it is not logically binding. On the other hand, the miracle argument leaves antirealists the burden of proof for what status theoretical entities have if they are not considered to refer to anything, and for how to draw a line between observable and non-observable phenomena.

7.1.2 Semantic Theory of Truth and Scientific Realism

In Chap. 4, I noted that the concept of a fact is unclear, and that it obscures the correspondence theory of truth. The semantics of formal languages, developed by Tarski, offers an approach to define truth and correspondence where facts need not be mentioned. In addition to explicitly explaining the correspondence theory of truth, Tarski’s theory also seems to provide a way with which to defend scientific realism (see e.g. Niiniluoto, 1987, 1999). With the help of Tarski’s theory of truth, we can determine the truth of scientific theories and their relation of reference to the world. However, many scientists will not accept a thesis according to which the terms of scientific theories could be interpreted using Tarski’s theory (see Tuomela, 1973).

Formal semantics sets out to define truth as the relationship between language and its model. I will present this in a simple way in order to highlight the key ideas. It is understood that language L has names for individuals and predicates that describe the properties and relations of the individuals. Names and predicates are called the terms of a language. In order to interpret a language, we need a domain,

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2 We must separate direct observations from indirect observations where different observational tools are used, such as cloud chambers in physics.
3 Tarski (1999) considered his own theory of truth to be an explication for the intuitive concept of truth and to be neutral compared to different philosophical theories of truth.
4 I will lean on elementary predicate logic in this presentation.
or a set of objects, which we will call $D$, and an *interpretation function*, which we will call $I$, that assigns an entity from $D$ to each name (constant) in $L$ and links a corresponding property or relation of elements of $D$ to each predicate of $L$. An interpreted language therefore talks about the set $D$, its objects, and the relations between them. We call the pair $[D,I]$ a *model of language $L$* or an *$L$-structure*. It can be defined set-theoretically in the following way:

1. $D$ is a *set of objects*;
2. $I$ is a *function* from the set of terms of a language to $D$;
3. $I$ assigns an element of $D$ to each constant, $I(c) \in D$;
4. $I$ assigns a subset of $D$ to each unary predicate $P$, $I(P) \subseteq D$;
5. $I$ assigns a subset of an $n$-fold product of $D$ to each $n$-ary predicate $P$, $I(P) \subseteq D \times \ldots \times D$.

I would like to emphasise that $D$ is a *set* and $I$ a *function* in terms of the set theory. It should be noted that $I$ assigns sets to the terms. This is an expression of Tarski’s semantic theory of truth being completely *extensional*, meaning that the extension of the terms in $D$ are assigned to the terms. The models do not in any way reveal what the terms mean, what their intension is. With the use of the semantics that Tarski has presented, we can determine the truth of the sentences in language $L$ in relation to the model. Language $L$ has its own syntax according to which sentences are built. In addition to terms (individual names and predicates), language has connectives, such as $\sim$ (not), $\&$ (and), $\vee$ (or) and $\rightarrow$ (if...then), and quantifiers such as $\forall$ (for all) and $\exists$ (there exists). Let $[D,I]$ be an interpretation of a language. The sentences of language $L$ do not hold any truth value in themselves. Truth can be determined only for the interpreted language $L$, or in relation to some model $[D,I]$ of the language. The idea of determining truth can be presented slightly simplified in the following way.

- $P(c)$ is true iff $I(c) \in I(P)$;
- $P(c_1,\ldots,c_n)$ is true iff $<I(c_1),\ldots,I(c_n)> \in I(P)$;
- $\sim \phi$ is true iff $\phi$ is not true;
- $\phi \& \psi$ is true iff $\phi$ and $\psi$ are true;
- $\forall x \phi(x)$ is true iff $\phi(x)$ is true, whatever $x$ might be.

As we can see, this determination of truth does not call on facts, but rather all sentences are decomposed into key elements. We can therefore avoid a common fact ontology. In order to determine the truth of a sentence, we must only know which sets the objects belong to.

This approach, however, has its limits. One such limit is that there are many meaningful statements that cannot be formalised using predicate logic (see Wrenn,

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5 I assume here that $L$ is a language in accordance with predicate logic.
6 To deal with quantifiers and variables, Tarski developed an ingenious concept of satisfaction. I am not going to define this concept, as it can be found in all textbooks for predicate calculus.
7 This concerns facts as well, but they are elementary predictions: “snow is white” is true iff the stuff snow has the *property* of whiteness.
Such statements include those expressing causality, such as “The door slammed shut because there was a gust of wind outside,” or those about moral norms, such as “We are obligated to keep our promises.” Their semantics cannot be built on only the references of the terms. We need abstract entities like “possible worlds.”

A possible world is an imaginable world that differs in some ways from the real world or the actual world. Possible worlds present how things might be or have been (see Jacquette, 2006, p. 411). Possible worlds can be utilised when examining different philosophical concepts and the semantics of language. When possible worlds are included in formal semantics, we must expand the function of interpretations to map the terms of a language to possible worlds. A language has an L-structure (model) for each possible world.

The correspondence theory, based on logic, assumes that the relationship between language and the world can be expressed as the relationship between language and its model. The world or a part of it forms the model in terms of formal semantics, and the interpretation function gives the references of the language’s terms in the model. Niiniluoto follows this strategy. The realistic theory of knowledge developed by Niiniluoto (1987, 1999, 2014) avoids the problems of metaphysical realism in some sense. Niiniluoto defines a conceptual framework as the pair $K = (L, I)$ formed by language and its interpretation, where $L$ is language and $I$ is the interpretation function that maps the language to possible worlds. The interpretation function, then, links an L-structure $W(K)$ dependent on the language $L$ to each possible world $W$. The structure $W(K)$ includes all the objects and relations that are needed to set the truth conditions of language $L$ in world $W$.

Niiniluoto’s way of treating the truth in this is significant. The truth of the sentences of language $L$ is relative to framework $K$ and the truth value of a sentence in world $W$ is determined by the L-structure $W(K)$ of world $W$. The sentence $p$ is true in world $W$ if and only if $p$ is true in the structure $W(K)$. If another conceptual framework $K^*$ is in use, then other sentences could be true in $W$. This paves the way for pluralism. It is important to emphasise here that there is no disagreement between the different frameworks. If sentence $p$ is true in world $W$ in the framework $K$, and untrue in the framework $K^*$, then it is not a logical contradiction, because the sentences have been interpreted in different ways.

Amongst the possible worlds is the actual world THE WORLD that corresponds to the L-structure or the model THE_WORLD(K). Especially those sentences that are true in the model THE_WORLD(K) that corresponds to the actual world are really true. This logical approach gives a “realistic” definition of truth to the sentences of a language. A whole other issue is that we do not necessarily know what the actual world is, and defining it is the very duty of science.

Essential in Niiniluoto’s construction is that the framework $K = (L, I)$ does not exhaust the whole world, but the interpretation function $I$ “collects” a set of objects and exactly those kinds of relations that correspond to the predicates of language $L$ from each possible world. This collecting is in a certain way constructing the world, where objects are identified and their characteristics are chosen. This avoids the totalising characteristic of the metaphysical realism that Putnam criticises:
Metaphysical realism assumes that one, and only one, correct and perfect description of the world exists. According to Niiniluoto, we have as many descriptions of the world as we have frameworks. He calls his view conceptual pluralism. He also emphasises that the interpretation function is not a physical fact, but based on the convention made by humans (Niiniluoto, 1987, p. 140). Conceptual pluralism examined on this level is very close to viewpoint relativism. But the differences are in the details.

Niiniluoto considers the Tarskian theory of truth presented above to be a realistic correspondence theory. He defends this by saying that although choosing a framework is a convention, the truth of statements is always determined by the world that is being examined. Niiniluoto (1987, p. 142) has to make an assumption here that each possible world has a unique L-structure for each language L. Especially the actual world has a “real” L-structure. Let THE WORLD be a real world that is not yet conceptualised or carved into pieces (p. 141). It still has factuality.

Niiniluoto’s conception that “one and only one L-structure fits THE WORLD” is either trivial or incorrect. It is trivial in the sense that if I is defined as mapping language L uniquely to possible worlds, then of course there is only one L-structure in each possible world. This assignment gives us the family of all L-structures… The factuality of THE WORLD means now that one and only one of these L-structures fits THE WORLD. This structure… is partly relative to language L, but still it is “chosen” by THE WORLD from all L-structures. (Niiniluoto, 1987, p. 142)

A particular problem is that a model must have a domain D, whose objects the mapping is made to. Even according to Niiniluoto, the world itself does not have a division into objects. This is why the set of objects D must be determined, or “collected” from reality. Set theory requires elements of sets to have an identity. A set cannot be made of the world without using some criteria for identifying objects. Therefore, we cannot assume that each world has been assigned a domain where the interpretation is made.

Another problem is how the interpretation function assigns the terms of a language, especially the predicates to domains. Let us consider that language L is the language of the science of physics, and it includes such abstract terms as atom, electron, field, spin, etc. In order for the interpretation function to “realistically”
map language $L$ to the world, the terms must be interpreted correctly; for example, $I(\text{“atom”}) = \text{a set of atoms}$. But how can we gain access to “a set of atoms” if and when we do not even know if atoms exist. To define $I$, we must have an independent description of language and reality in use. And if we have this description, then the correspondence of language and reality is totally dependent on how we define it to the “described” reality, as van Fraassen (2008, p. 233) emphasises. Correspondence then becomes the epistemic relationship between language and the described world. Putnam has, for good reason, called correspondence a “magical” connection that miraculously connects our concepts to reality (1981, p. 16). The “magic” of the correspondence theory comes from the lack of explanation for what and how scientific terms refer to: We must simply presume correspondence.

Theoretical terms cannot be connected to reality by pointing out and measuring entities, because they are supposed to specifically refer to unobserved entities. In addition, ostensive definitions are ambiguous, something that especially Wittgenstein (1958b) and Quine (1960) have emphasised. Ostension is done to physical phenomena, such as to the appearance of an object, but it does not reveal what meaning humans give to the object, and what object is in question. This phenomenon is called the theory-ladenness of observations in the philosophy of science: Observations are not “pure,” but affected by instruments of observation and theoretical assumptions (Hanson, 1958).

When the reference of theoretical terms cannot be fixed with observation, the following four alternatives are worth to consider.

1. The laws (axioms) of theory fix references.
2. Interpretation includes the meanings of terms and they fix references.
3. Objects are causally connected to terms (and mind) and these connections fix references.
4. Terms refer to “natural” properties existing in the world.

The problem of option 1 is that truth conditions of sentences cannot fix the references of terms. Sentences could be true even if the terms within them refer to completely different entities than we assume they do (Putnam, 1981, pp. 32–35). Quine (1990, pp. 33–36, 50–52) refers to this phenomenon by the concept of indeterminacy of reference: Alternative ways of fixing the references of terms without changing the truth values of the theories always exist.\(^8\) Option 2 requires us to have meanings before interpretation. However, they do not have any part in the framework $K = (L,I)$. My guess is that Niiniluoto was thinking of this alternative when presenting his own theory (cf. Niiniluoto, 1987, Chap. 4.3). If we build the interpretation functions from the starting point that they assign the “correct” reference (e.g. $I(\text{“atom”}) = \text{set of atoms}$) to terms, then we could imagine that there is only one way in the world to correctly define an interpretation function. But then the framework would have to assign meanings to terms in another way than by listing the truth conditions of sentences (cf. Dummett, 2004). This alternative can also be criticised.

\(^8\)Quine also calls the indeterminacy of reference ontological relativity.
because meanings within the mind are not sufficient on their own to fix references; to do that, a right kind of relationship to the environment is also necessary (see Putnam, 1988, Chap. 2). The problem of option 3 is that the causal relationship that fix the reference has to be exactly the right one, otherwise correspondence cannot be postulated (Putnam, 1981, pp. 43–48; Wrenn, 2015, pp. 81–88). We also cannot know if the references of terms have any causal power at all, and if so, what it is. Option 4 assumes natural characteristics or kinds, but this assumption is problematic and artificial (cf. van Fraassen, 2008, pp. 230–232). If these kinds of natural characteristics existed, we could think that they would be the ones to be chosen as the references of terms in THE WORLD.

In terms of viewpoint relativism, the pluralism of frameworks that Niiniluoto presents is more or less correct. My previous criticism is aimed at the idea that if we consider a framework to literally be the pair (L,I), where I is a function of language L to possible worlds, then it is a completely abstract concept that in itself does not explain the relationships between language and the world. In order to complete the concept, we need more assumptions in accordance with options 1–4. Without such assumptions, there are numerous potential L-structures. Niiniluoto’s difficulties actually come from Tarski’s theory, as it is completely extensional. The interpretations of terms are only sets, they do not provide any content for the terms. For example, the reference of the term “cat” is the enumeration of cats. According to Hartry Field (1972), Tarski’s theory has no informative value.

There are other ways than Niiniluoto’s to use the model theory approach to solve the problematics of realism and relativism. In my article Epistemologinen relativismi [Epistemological relativism] (1985), I present that models are constructed with the help of certain principles of modelling, based on our experiences of the world. Models are not parts of reality, but rather constructions that we condense our experiences of the world or its fragment into.

A portion of the entities and relations that we have identified can be “included” or “embedded” to the model through their representations. The models can include artificial objects, such as real numbers and idealisations. This is why a perfect correspondence between a model and the world (or its fragment) cannot exist, even in theory. Fitting cannot be built on structural similarity because the world does not have a given structure: The world can be structured in many different ways. The relationship between a model and the reality is similar to the relationship between a map and a subject; the model corresponds to reality in some respects, but not in everything. This is why the relationship between a model and the reality is fitting, which is always partial.

The connection between language and the world has been presented in two ways in Fig. 7.1. On the right, we can see an indirect interpretation of connection, where the model is a theoretical abstract or construct that does not directly correspond to reality. If the model is adequate, then it fits a part of reality. Fitting is discovered with empirical criteria; it is a question of the fitting of empirical phenomena and the model.

The left side of the figure shows the concept of a direct connection, where a certain fragment of the world is a model (or L-structure) of language. The connection
is transmitted by an interpretation function, which happens to be the correspondence function. Therefore, all of the terms of language in the theory are interpreted straight to the world. This approach does not solve the difficulties that arise from a realistic interpretation of the language-world relationship. Contrary to a Tarskian correspondence theory that is not relevant for the philosophy of science, the analysis of language-world relationships that is based on the usage of intermediate models is gaining traction in the philosophy of science.

### 7.2 Viewpoint Relativism and Perspectivism in the Philosophy of Science

Anti-realistic tendencies have grown stronger within the philosophy of science. They have revealed the deep perspectivity of science. Perspectivity is in almost all scientific research and in all of the phases of constructing theories, from gathering data and making observations to the basic principles and application of theories. Within it, perspectivity always includes choosing a point of view, which is why I consider perspectivism to extend viewpoint relativism to scientific knowledge and research.

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*In a private correspondence, and referring to Fig. 7.1, Niiniluoto presented that our difference is that I consider truth to be a concept based on experience, while in his theory, “the structure \( W_L \) of the actual world is partially unknown and non-epistemic for us.” My main question has been what justifies us to think that such structures and even unique ones exist in every world.*
Perspectivism questions two suppositions of the received view of theories:

1. Structure supposition: Theories are sets of statements;
2. Status supposition: Theories could be literally true descriptions of reality.

Of course, the structure and interpretation of the theory is more complicated. According to the received view (Suppe, 1974), theories are structured on two levels, where the upper level is composed of laws that tie theoretical terms together. Through correspondence rules, some theoretical terms are then connected to the observational terms that compose the lower level. Such correspondence rules only provide a *partial interpretation* of the theory.

Alternatives to scientific realism can be sought by disputing the status or structure supposition of the theories. Instrumentalism and empiricism deny the status supposition. Meanwhile, a structuralist or model-based theory conception denies the structure supposition. Often critics deny both suppositions. According to a structuralist view, theories are models that correspond to the reality more or less accurately (see Suppe, 1974; Worrall, 1989; Giere, 2006; van Fraassen, 2008). The *constructive empiricism* that van Fraassen (2008) represents is an example of a structural approach. According to van Fraassen, we cannot consider the truthfulness of theories, only their empirical adequacy. The *empirical adequacy* of a theory means that everything that it says about *observable* entities is true: Theories are only expected to correctly describe the observable parts of reality. The truthfulness of a theory in terms of unobservable entities is not relevant, as it is for scientific realism. This kind of view is often called instrumentalism.

In addition to van Fraassen, Giere is another significant philosopher of science that breaks away from the traditional scientific realism. He calls his own approach *perspective realism*. He has paid special attention to the perspectivity of science in his book *Scientific Perspectivism* (2006). According to Giere, it is specifically perspectivity that corresponds to current scientific practices. Giere characterises perspectivism by highlighting its differences to certain other central approaches in the philosophy of science. Perspectivism lies somewhere in the middle of “objectivist realism” and “constructivism.” Objectivist realism emphasises that the objective of science is to use its theories to provide us with a true picture of what the world is and that accepting a scientific theory means believing it to be true (Giere, 2006, p. 5). Objectivist realism is the term that Giere uses for scientific realism. Constructivism is the theory that science constructs its objects in a certain cultural context by using its theories, but that the objects do not have an existence independent of the theories. Perspectivism also distances itself from the “absoluteness,” or the belief in an absolute truth, of objective realism. “We simply cannot transcend our human perspective” (p. 15). “Truth claims are always relative to a perspective” (p. 81). However, Giere does not wish to completely reject realism and assures the reader that perspectivism is realism as much as science can afford it.

As I see it, the war Giere is waging on two frontiers against objectivist realism and social constructionism is understandable from the assumption that scientific knowledge is equally dependent on the reality and the perspectives used by science. I have constantly emphasised this in this book. Giere, as well as almost all
philosophers who defend the relativity of knowledge, however, disassociates himself from relativism. In reality, Giere, in his own words, is disassociating himself from the “silly relativism” that considers all perspectives to be equally as good (p. 143). I have called such relativism extreme relativism, and similarly disassociated myself from it.

Giere uses the perspectivity of seeing and observing colours as a starting point for developing perspectivism. Exactly like pragmatist C. I. Lewis, Giere also considers an observation to be the function of the input of a phenomenon and our observational instruments. The effect of an observational instrument can never be eliminated. The observational instruments used by science are perspectival at least because of the following reasons:

1. Observational instruments have been made by humans to serve a certain function.
2. Observation is selective: It reacts only to certain stimuli or inputs and is “blind” to other stimuli; observation is directed at only certain aspects of reality, not at the entirety of reality.
3. Observational instruments process input in those specific ways that are dictated by their physical compositions (telescopes, MRI, etc.).

Giere hopes to offer an alternative approach to the received linguistic view of theories, according to which theories are sets of statements and representation prevails between language and the world. Giere’s view of theories is model-based.

What is special about these models is that they are designed so that elements of the model can be identified with (or coordinate with) features of the world…. Scientists use models to represent aspects of the world for various purposes. (2006, p. 63)

Models are not true in any relevant way. Instead, models can fit with different structures. Giere also uses the metaphor of a map to describe the relationship between models and reality. This concept of a model has all of the elements of a point of view: The subject is a scientist who uses models to represent aspects of the world. To use the terms of viewpoint relativism, models are points of view of reality. (Cf. Vázques & Liz, 2011; Liz, 2013).

Giere describes his account of theories in the following way.

Scientists generate models using principles and specific conditions. The attempt to apply models to the world generates hypotheses about the fit of specific models to particular things in the world. Judgements of fit are mediated by models of data generated by applying techniques of data analysis to actual observations. Specific hypotheses may then be generalized across previously designated classes of objects. (2006, pp. 60–61)

In this account, models are constructed according to general principles and applied by making hypotheses about the fitting of models with observable reality.

Constructing theories is perspectival. The principles of science express theoretical perspectives, which in turn reflect the aspects (qualities) of the world. Examples of this are Newton’s principles of mechanics, Maxwell’s principles of electrodynamics, and the principles of relativity. Laws, meanwhile, are principles that are used to construct models. In addition to general principles, there are more tangible
“laws of nature” in science, which are lower level generalisations than grand principles. Giere considers them to be descriptions of a model. They are (can be) true generalisations of a model, but do not directly concern reality. Representative models can be made tangible through generalisations and specific hypotheses, making their empirical testing possible. According to Giere, the empirical testing of models is “a process of bringing together two perspectives, one observational and one theoretical, in order to decide whether the model fits the world as desired” (p. 89).

Scientific theories (in natural sciences) are mathematical structures (models) according to van Fraassen, as well. Because there are no mathematical structures in the world, a theory or its model cannot be directly associated with the world. A theory only receives its empirical content through “embedding” the empirical phenomenon that is being examined into the broader structure that defines the theory. Embedding means that the measurements made of the observed phenomena can be set as the values of the theory’s observational variables (observables) (van Fraassen, 2008, p. 238). Embedding makes a theory a structure that represents a phenomenon. Embedding is different than assuming that the phenomenon itself is a structure. If there is no embedding, the theory remains a mathematical system that has no connections to observable phenomena. The theory therefore only concerns the real world after this embedding.

Data is carefully coded material about observations. In order to process data, we must also create models for it. A data model is a description of the structure of the data and its relationship to real phenomena, such as measurable ones. Giere’s approach corresponds to pragmatism in many ways. Although Giere does not refer to John Dewey’s views, Dewey’s book *The Quest for Certainty* (1929), for example, has many of the same components. Dewey’s analysis of data is revealing (Chap. 4). According to Dewey, physics substitutes data for objects (p. 96) and reduces experienced objects to the form of relations that are neutral in respect to qualitative traits (p. 102). Dewey’s pragmatism emphasises the different operations that phenomena are changed with. Operations are regulative and instrumental points of view for conducting new observations (p. 179). Observations produce data, and processing it slowly allows access to objects. Objects are constructed entities, and therefore not given starting points.

The data model has a key position in van Fraassen’s (2008) view of science, as well. A data model is an abstract structure that is used to represent the phenomenal world. Theories, meanwhile, are set in relation to a data model. A phenomenon on its own does not dictate in any way what the structure of a data model should be (more specifically, which structures are suitable models of data for a phenomenon). The construction of a data model is a pragmatic and perspectival process:

A particular data model is relevant because it was constructed on the basis of results gathered in a certain way, selected by specific criteria of relevance, on certain occasions, in a practical experimental or observational setting, designed for that purpose. (p. 253)

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10 In terms of logic, “embedding” can be expressed so that a model has an empirical submodel that corresponds to the observed phenomena. “A model can represent a given phenomenon accurately only if it has a substructure isomorphic to that phenomenon” (van Fraassen, 2008, p. 309).
That is, the phenomenon, what it is like taken by itself, does not determine which structures are data models for it—that depends on our selective attention to the phenomenon, and our decisions in attending to certain aspects, to represent them in certain ways and to a certain extent. (p. 254)

A theory’s relationship to data is one of the central questions of empiricism and perspectivism. Giere supports a slightly broader empiricism than van Fraassen does. While for van Fraassen, what outlines what is empirical is humans’ natural power of observation, for Giere, perspectivist realism construes the compatibility of models and reality more broadly:

Rather, for me, which features of a model we take to have counterparts in the real world depends on what differences in the world can be reliably detected by whatever means, however remote. (Giere, 2006, p. 131)

If theoretical differentiations cannot be empirically identified in a broad sense, we must be agnostic in terms of their realness (p. 132).

The relationships between theories and data can be approached through theoretical pluralism. It is a question of the same data being able to be explained with several alternative theories. Quine (1990, pp. 95–102) calls this the under-determination of theories. It is not sufficient to use data (observation information) to choose between two competing theories if they are equal in terms of data. Quine says that two theories are empirically equivalent if they have the same observable conclusions, or to express it through data, if they explain the same data. In terms of relativism, it is an important observation that empirically equivalent theories can be logically contradictory and make different assumptions about unobserved entities. The ontologies of these theories differ, even though they are empirically inseparable. Which theory should we choose? Empirically equivalent theories are as “true” or as adequate, although different and possibly contradictory. For a pluralist, the situation is to be expected, but for a realist, it is a more difficult situation, as she considers theories to be descriptions of reality, and now has several descriptions that are contradicting in terms of theoretical assumptions, and that cannot all be true in a realist sense.

A choice of theories is largely a question of points of view. Many different criteria can be used for it, such as empirical adequacy, effectiveness of explanation, effectiveness of prediction, practical applications, simplicity, conservativity, fallibility, intuitiveness or systematicity. Most of the above criteria only indirectly relate to the question of truth. For example, simplicity and systematicity are not really indicators of truth. Viewpoint relativism in the philosophy of science means, in a broad sense, that formulating and justifying theories is always done from a certain point of view. Choices are always made in science, and they do not have neutral criteria.
7.3 Strong Objectivity and Standpoint-Methodology

The differences between natural sciences and social sciences has been significant in the philosophy of science. These differences have a long history, which G. H. von Wright (1971), for example, has discussed. Above, I have discussed the problematics of realism and antirealism in terms of natural sciences. Giere and van Fraassen’s structuralist account of theories, for example, is about exact sciences. I would now like to consider what viewpoint relativism could mean in a societal study where the object of the study itself is fundamentally mind-dependent, as Searle has shown.

Peter Winch (1958, 1964), who got his start from Wittgenstein’s late philosophy, developed a radically new philosophy of social sciences in the Anglo-Saxon tradition. Its main idea is that a researcher cannot understand her subject, the actions of humans, without using the concepts used by the people or background culture herself: “The concepts used by primitive peoples can only be interpreted in the context of the way of life of those peoples” (Winch, 1964, p. 315). Each way of life (culture) is an independent whole that should not or cannot be judged from the outside with the criteria of other ways of life. Each way of life can have its own conception of rationality. It would be wrong to judge, for example, the magic of an African tribe named Zande by using the objectivity criteria of Western science (Winch, 1964).

But then Winch (1964, pp. 322–324) also admits that rationality has certain limitations and that there are certain problems that a rational person has to take a stand on in all cultures. These problems, according to Winch, are about such “existential” basic human parts of life as birth, death, and sexual relations. How these parts of life are conceptualised and what rules are associated with them differs from one culture to another. But these things are present in one way or another in all cultures. They are certain kinds of anchors of life.

According to Winch, the rules of social action that constitute the society mean that in societal studies, we need certain social sciences that try to understand these rules. This kind of philosophy of social sciences attempts to find another conception of the objectivity and rationality of research than natural sciences has. In natural sciences, objectivity is the elimination of subjectivity, locality, and cultural background. The conception of objectivity adopted from natural sciences has cast a shadow on the development of social sciences, as Sandra Harding (2015) claims. From the viewpoint of feminism, she especially criticises the dominating philosophy of science for having a flawed or biased concept of objectivity.

Although the object that Harding names in her critique is logical empiricism (positivism), it is more a question of the analytical philosophy of science originating from logical empiricism, and the scientific realism behind it. In this criticism, Harding heavily leans on the sociological research originating from Kuhn (see

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11 The perspectivism discussed in the previous section is first and foremost related to natural sciences and sciences that use mathematical models more generally.

12 I take Harding to represent feminism in the philosophy science, although she is criticized by other feminists.
Fuller, 2006), but also on relevant gender and postcolonial research (Harding, 2015, pp. 13–18).

At the core of this critique is that the objectivity and the freedom of values that the dominating philosophy of science emphasises are apparent. This can be seen where things that serve the interests of certain groups, such as the elite in power, the army, or the economy, have been “objectively” studied in the name of the logic of science. Science is “Western” science and the science of the white man, and does not do justice to the “world of sciences.” According to Harding, the dominating research has not been seriously interested in women’s rights, the problems of the developing world, poverty or climate change. Research into many of the factors affecting women’s lives have been neglected (domestic violence, sexual harassment, the value of women’s domestic work, glass ceilings, power structures, etc.). Developing countries have been treated as the producers of raw materials and as market areas for Western countries, instead of research being done on how they could themselves utilise their raw materials and develop local production. There are an endless number of these examples. This critique is not about whether research has been concentrated on the wrong subjects or neglected certain subjects, but is rather about more basic questions, such as the ontology, epistemology and methodology of research.

In order to understand this situation, we can examine how analytical philosophy of science was created. Behind it is the Vienna Circle, created in Vienna before the second World War in the 1920s, which represented logical empiricism, also called logical positivism. At the beginning, it was a politically radical movement that criticised Nazi science, defended independent research and discussed progressive themes. Hitler’s rise to power forced some of the members of the Vienna Circle (e.g. Carnap and Reichenbach) to move to the United States. There they helped create the Unity of Science movement that advocated for the unconditional impartiality of science as the focus, with the aim to diffuse the political nature of the Vienna Circle.13

Postpositivist philosophy of science started to develop in the United States in the 50s. Its basic features included the value-freedom of science, materialistic ontology, secularism, emphasising the unity of science, and methodological monism. It was thought that these principles are suitable for all research, not just researching nature. Harding (2015, pp. 119–122) generalised this view of the philosophy of science to mean that only science that follows these principles is the “real science.”14 It was realism that believed that there is one world “outside,” one truth or natural order,

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13 This is Reisch’s interpretation (2005). Reisch refers to the McCarthyism of the 50s as one of the reasons to emphasise the unconditional impartiality of science.

14 Harding’s critique about the philosophy of science is less valid because she does not take the diversity of analytical philosophy of science and the debate within it into account. For example, analytical philosopher von Wright’s book Explanation and Understanding (1971) defends an understanding approach to research in social sciences and criticises extending causal explanation to them. By the way, Harding does not refer to Winch at all, which is surprising, as Winch was one of the first philosophers within the analytic tradition to emphasise the special nature of social sciences.
and one and only one science can discover it. In addition, in terms of the world of sciences, this philosophy of science implies the view that only one society can do science—the modern Western society.

I want to highlight two of the central themes from this discussion, objectivity and pluralism. According to Harding, the objectivity represented by postpositivist philosophy of science is weak objectivity. She does not dispute the credibility and the essentially open criticality of the methods of normal science. The problem is that the dominating science has been built on the interests and culture of Western society so that it serves its power structures and industry. It is in no way value-free, but uses “those conceptual frameworks that primarily serve the values and interests of the most powerful groups” (p. 34). In addition, societies indirectly affect research, for example, by holding on to their own agenda (competitiveness, efficiency, security), steering funding at certain themes, initiating big research projects, controlling universities, etc. At the same time, steering inside of science is based on the dominating paradigm. All of this means that any research or approach outside the mainstream is left in the margins and without the opportunity to develop.

Consider economics as an example of this: it is usually considered to be an objective description of the laws of the economy. The mathematical models developed and used by economics are a paradigm of an exact social science. But as economist Diane Elson (1995) has demonstrated, there is a very clear gender bias in economics. Economics started as studying and defending economic growth (cf. also Beckert, 2016). The dominating economic order is “patriarchal,” and the measures set to further economic growth almost always weaken the groups in the worst positions and affect the status of women. There is a deficit in representing equal rights that dominates the economy. Economics is blind to the housework, social work and voluntary work that is done in society, and that maintains the confidence of the society, Elson emphasised.

Harding defends strong objectivity as the opposite of weak objectivity. It rejects monism and defends pluralism. It is based on the different conventions for doing science. Research is always anchored more or less in the surrounding society and its culture. There is a strong connection between how and where we live, and what we can know: Being and knowing form a unity. Harding discusses standpoint methodology, according to which a researcher always comes from a certain position and situation to do her research. Central to this situation is the relationship between the researcher and the subject of research, the point of view that the subject is approached from. A standpoint is a consciously adopted point of view. Donna Haraway (1988) has developed a similar methodology to Harding, and uses the term “situated knowledge” to describe it. According to it, what one knows or experiences reflects one’s social, cultural and historical location.

When a dominating philosophy of science and methodology start from a certain seemingly neutral situation, radical research must question it. In order to achieve a more objective explanation for nature and societal relationships, researchers must approach the research outside of the dominating conceptual framework. Research frames must be built “from below,” meaning the problems should be viewed as much as possible from the points of view of those affected by them. The knowledge
of experts by experience and traditions are also important sources of knowledge. New approaches that produce new knowledge also arise from these positions. Often these approaches are local in terms of both the actor and the subject. Therefore, local science exists, contrary to the ideal of the unity of science.

For viewpoint relativism, strong objectivism means recognising that research can be done from many different points of view, and that different points of view provide different knowledge about phenomena. Only by adopting different points of view can we get a more accurate picture of phenomena, rather than by only following the dominating point of view. We can no longer hold on to the principles of the unity and monism of science. We can also not assume that different perspectives blend together or that they could be replaced with a “hyper perspective.”

Strong objectivity leads to the principled pluralism of science. Parallel with viewpoint relativism, Harding (2015, p. 161) emphasises that the standpoint methodology makes it possible to see such aspects of nature and societal relationships that would otherwise be hard or impossible to capture. This is why accepting points of view as the foundations of science is a benefit to science, not a hinderance to growing knowledge, as the established philosophy of science tends to think.

Harding, as well as other pluralists, wants to separate herself from relativism (pp. 43–45). But again, relativism here means the conception that all claims of knowledge are as good. That Harding would want to separate from this kind of extreme relativism is understandable, but does not concern the modern viewpoint relativism that accepts pluralism and the comparison of different approaches. Strong objectivism does not mean that all claims and opinions should be accepted. In standpoint methodology, knowledge is assigned to situations, and this means that a situation makes it possible to receive certain kinds of knowledge, while hindering us from receiving some other kinds of knowledge. Knowledge is therefore always partial and subject to criticism. According to Harding, a strongly objective study should be “fair”: “fair to the evidence, fair to one’s critics, and fair to the most severe criticisms one can imagine even if no one has yet articulated them” (p. 33). Although strong objectivism does not deny the value-orientation of research, it does not accept claims only because they have been made with good intentions. Knowledge is always created in a certain framework and in a certain society that has its own rules and criteria. Primary acceptance of knowledge is always done within the bounds of these rules and criteria. What else this local knowledge is suitable for should be resolved separately.

Harding’s strong claims against the unity of science are mostly based on the “empirical” or factual pluralism of science, as can be seen from gender and postcolonial research. However, fundamental pluralism is a different subject. Harding (pp. 116–117) refers to the book produced by Kellert, Longino, and Waters, *Scientific Pluralism* (2006), where the authors commit to pluralism as an empirical question:

> As pluralists, we do not assume that the natural world cannot, in principle, be completely explained by a single tidy account; rather we believe that whether it can be so explained is an open empirical question. (Kellert et al., 2006, x)
Their “pluralistic stance” is to reject monistic requirements and to leave open the final answer about the truthfulness of monism, to be empirically solved. Harding believes we should take a stronger stance, according to which “considering all evidence available now, it [monism] is unreasonable” (p. 121). However, she does not appeal for this stronger commitment with rational arguments, but ultimately with the negative consequences of supporting monism: “The unity position discounts the value of a ‘world of sciences’ to non-Western societies as well as to Western ones” (p. 121). In terms of viewpoint relativism, pluralism should be justified by appealing to the countless aspects of reality, which we can gain access to with different kinds of points of view. These points of view cannot be eliminated or substituted with a “view from nowhere,” which is why “a single tidy account” is not possible.

The concept of a strong objectivism and the standpoint methodology that Sandra Harding developed are interesting in terms of the philosophy of science. The problem is not that “Western” science and its methodology has not created a lot of new knowledge and results that have practical applications for technology and healthcare, for example. It is that this science is not value-free, but rather serves the technical interests of controlling phenomena, as Habermas (1971) emphasised. It does not achieve the aspects of reality that are important for emancipatory interests. The notion of science and its methodology must be expanded, and scientific and methodological pluralism must be accepted. Wishing for one science and one methodology is pointless and harmful. We need other approaches that can reach other aspects of reality. The object of knowledge is the inexhaustible reality that slowly unfolds by adopting new points of view. The methodology of science must be pluralistic.
Chapter 8
Critical Relativism and Disagreement

Abstract The main message of this book is that moderate viewpoint relativism is a sound epistemological stance and basis for learning and creating new knowledge. The world is complicated and open to new interpretations and approaches. Everything has many different facets and aspects that different points of view bring out. The world can be articulated in different ways. This diversity is a gift—not a problem. Still, not all points of view have to be accepted. I consider critical relativism to be a relativist orientation where points of view can be critically examined by weighing their justifications and effects. The first part of this chapter deals with critical relativism, the basic theses of which are plurality, tolerance and criticality. The second part deals with epistemic disagreements and resolving them. This chapter also functions as a review of the views and principles presented earlier in the book, but now I will examine them from the perspective of resolving disagreements and social criticism.

8.1 Critical Relativism

Epistemological relativism, considered in this book, has many virtues that are useful in society. Maria Baghramian has explored these virtues and their problems in her article “Virtues of Relativism” (2019). Her starting point is that relativism might be conceived to be a stance rather than a theory that is true or false. It being a stance means that relativism is perspective with normative consequences. According to this interpretation, a relativist stance leads to the cultivation of some key intellectual virtues like tolerance, curiosity, intellectual humility and open-mindedness. But Baghramian also shows that there are epistemic vices that undercut the positive effects of relativism.

Let us take tolerance as an example. Tolerance can be seen as an attitude that is strongly against any kind of authoritarianism, be it scientific, political or religious. Dogmatism or scientism are incompatible with tolerance. “Tolerance is a sui generis virtue, but it also strengthens other virtuous intellectual traits such as open-mindedness and fair-mindedness” (Baghramian, 2019). The contribution of relativism to tolerance is based on its criticism of absolutism. Another important virtue of relativism is the avoidance of intellectual rigidity, an example of which is “chauvin-
ism” and in general the intolerance towards “competing academic disciplines, differing ethnic and cultural groups and historical periods” (Baghramian, 2019). This is why many feminist philosophers tend to accept relativism. Humility is also a clear companion of relativism: Relativism is against intellectual arrogance. After exploring the possible virtues of relativism, Baghramian turns critical. Relativism might strengthen close-mindedness and intellectual arrogance, and it discourages curiosity and even tolerance. Especially problematic is that relativism undermines the virtue of truth:

Relativism is routinely accused of undermining the value of truth, and with it the values of knowledge and even justification as traditionally conceived, and thereby also neglecting and even undermining the virtue of truthfulness. (Baghramian, 2019)

So, it seems that the virtues of relativism might actually be vices. The Baghramian argumentation shows that there are not very close connections between relativism and proclaimed virtues. Otherwise, her criticism against the merits of relativism is based on serious misinterpretations (or misreadings) of the major proponents of epistemological relativism. Kusch points out these misinterpretations in his comments to Baghramian’s article (Kusch, 2019). First of all, Baghramian is repeating the not-so-new claim that according to relativism, all beliefs, justifications or frameworks are “equally good.” I have rejected this equally good thesis and so does Kusch and many other eminent relativistic philosophers (e.g. David Bloor, Paul Feyerabend, Lorraine Code and Sandra Harding). Evaluation always presupposes a measure or a coordinate system. Using one measure, two points of view might be equally good and using another measure, one of the points of view might be better than the other. There is no neutral or absolute criterion to compare points of view. What criterion one is using is dependent on various factors like practical implications, degrees of rationality, subjectivity, generality etc. But this does not mean that we could not distinguish between truth and falseness. I have defined the concept of relative truth so that every statement is either true or false in relation to different points of view. I have also shown that justification takes place in relation to an epistemic system. There are different epistemic systems, but according to their internal criterion, some statements are better justified than others.

Two features of viewpoint relativism that are important for good conduct of dialogue in society are the rejection of both absolutism and strong relativism. Absolutism means that there are absolute criteria for truth, justification, rationality or existence. The major problem in strong relativism is that it considers all frameworks to be equally good and thus loses criticalness: therefore, “anything goes”. But according to the moderate relativistic stance, all claims about truth or the justification of beliefs must be based on some framework or coordinate system, and frameworks are not given but constructed and selected. Keeping in mind these two central features, I will now try to show how the theses of viewpoint relativism are connected to epistemic virtues and the norms of discussion.

- **There is no viewpoint-neutral way to approach reality.** Behind every approach to reality, there is a point of view on which it depends. In discussion, one has to try to identify points of view behind any approach to reality.
• **Points of view are subjective, but they can be objectified.** We can discuss all points of view because they could be expressed or described in common language. No one can argue that her point of view is only emotional or unconscious and therefore outside criticism.

• **Each object can be considered from several different points of view.** Because there are many points of view, we have to be open and curious to all points of view. Only through many points of view could we have a complete picture about reality and the issues discussed in society.

• **There are no absolute, privileged or universal points of view.** This is the thesis of non-absoluteness. Particularly, there is no privileged point of view, be it scientific, materialistic, spiritual or whatever. It is quite often stated that the point of view of physics is the real or firm one. The point of view of physics is also seen to be universal. But it is not so, and we have to be open to different kinds of worldviews and different approaches to reality than the “normal” ones.

• **Points of view are suited to be improved and changed.** This thesis emphasises the dynamic character of points of view: They are not stable and eternal, but apt to continuous revisions, and dependent on action, communication and reflection. In the confrontation and comparison of different points of view, they are changed and improved.

• **Different kinds of criteria can be used to compare points of view.** This is the thesis against the claim of the “equal validity” of points of view. We can use different criteria for evaluation. In discussion, we have to be aware of the criteria people are using to evaluate points of view.

Although there are no direct conceptual links between viewpoint relativism and epistemic virtues, I dare to present some virtues that are useful or important in public discussion and dialogue. I concentrate the content of the theses of viewpoint relativism into three epistemic virtues:

• **Plurality:** Recognise the plurality of points of view;

• **Tolerance:** Tolerate and listen to points of view differing from yours;

• **Criticality:** Weigh every point of view.

I call viewpoint relativism which is committed to these virtues (norms) **critical relativism**. They articulate the stance of viewpoint relativism: That is, a “bundle of normative commitments” supporting knowledge acquiring and communication in society. These epistemic virtues have larger societal implications, too. Pluralism is a societal phenomenon that has gained importance as the homogeneity of the population has weakened and multiculturalism has increased. Multiculturalism is strengthened by migration, social media and a global Internet. Especially

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1 I do not know of anyone who has used critical relativism in the same sense as I do in this book. Critical relativism is discussed in business economics, specifically consumer research, which mainly refers to Kuhnian scientific relativism; see Anderson (1986). The concept of critical pluralism is very similar to critical relativism. Critical relativism is a kind of counterpart to the critical rationalism that Popper (1966) introduced.
postmodernism has interpreted pluralism to be a basic feature of modern society. However, pluralism is a part of the old ideal of liberal democracy. Democracy is specifically the way to get different points of view to peacefully meet.

Tolerance is one of the basic features of democracy. A liberal democracy allows everyone the right to their own opinion and to express it. A particular aspect of democracy is to protect minorities. Although decisions are made by the majority, everyone has an equal right to freedom and safety. Tolerance also includes the freedom of press. The press must have the ability to criticise those in power and to point out shortcomings. The requirement for tolerance also extends to social media. Censoring social media or restricting its use is not democratic, whether it is done by public authorities or by corporations. Different points of view bring out different facets of the world that would be unattainable if only a few (one!) points of view were in control.

The virtue of criticality is against the “anything goes” attitude, which accepts all points of view as “equally good.” Criticality is for the comparison of points of view in society. In comparison we can find that some points of view are better than others in relation to the criteria used. Now, it is important to see that these virtues of critical relativism are epistemic, not ethical. Especially the virtue of tolerance in epistemology means being open to different and even opposite points of view; they also tell us something about reality.

Tolerance without criticism paves the way for phenomena that tear down society. There is no requirement in a liberal democracy that everyone must share the same conceptions and values, but it is a requirement that everyone follows the same rules of a democratic society. A difficult issue is what to do if a group tries to seek to abolish or to break these rules. I tend to agree with John Rawls (1993, p. 152) who emphasised that society has the right to restrict the actions of this kind of groups (cf. hate speech). Examples of this are Nazi parties in Finland and in other Western countries. This restriction is based on ethical considerations, not on epistemology. Although the virtue of tolerance obliges us to tolerate opposite points of view, the virtue of criticality might lead to the conclusion that a certain point of view is harmful for society. Then based on ethical considerations, society might forbid the propagation of opinions that are against common values. I do not see this as a fundamental violation of the epistemic virtue of tolerance; ethics overrides epistemology.

Critical relativism is more a normative theory than a descriptive one; we can compare it to what Rorty (1980) calls “edifying philosophy”. Edifying philosophy is open to the “abnormal” and helps “to take us out of our old selves by the power of strangeness, to aid us in becoming new beings” (1980, p. 360); this is what the virtues of plurality and tolerance aim for. At its best, critical relativism is a societal stance that helps people to establish their place in a pluralistic society. Today, people must increasingly ask what they can believe in anymore, who is correct, and on what basis they can build their own view of the world. The proponents of postmodernism are inclined to lean towards extreme relativism, according to which all conceptions and opinions are equally as good: “anything goes.” But on the other hand, authoritarian one-truth movements have gained ground in the minds of confused people. Both stances are one-sided and flawed. Critical relativism belongs
somewhere in the middle of these stances, accepting diversity but not considering all conceptions to be equally as good.

8.1.1 A Post-truth Era?

The political climate has significantly changed in the last few years. This is an effect of the growth of the status of social media and the increased popularity of populist politics. Our time has been characterised as a “post-truth era.” The concept refers to the people and groups who do not care about the truth or about criticism, and instead appeal to emotions. Examples of this are the denial of climate change and the belief in alternative medicine and miracle diets without any compelling proof. Rejecting mainstream media and relying on the opinions of social media influencers and biased news channels is typical in the age of the post-truth era. While previously in politics, basing beliefs on facts and trusting science was encouraged, now, modern culture trusts in opinions. Instead of emphasising objectivity, each opinion is emphasised as the correct one because it is the opinion of its supporter. This argument is analogous with justifying emotions: Each emotion is the correct one for the one who feels it.

The Internet has accelerated and facilitated grouping together with like-minded individuals: there is talk of bubbles and echo chambers. Extreme opinions are strengthened in echo chambers. The Internet aggravates group polarisation in society. Polarisation is also aggravated by the fake news and the manipulation of information that have increased on the Internet. There have even been attempts to legitimise lying by calling lies “alternative facts.”

Cass Sundstein (2001, pp. 65–68) found two reasons for the increase in group polarisation. Firstly, there are only a certain number of different points of view available within a group. Secondly, because people want to be perceived favourably by other group members, they will adjust their views towards the dominant position. Sundstein is especially worried about the effects of echo chambers on democracy. It is harder than ever to have a constructive dialogue and to find shared views.

However, the post-truth era is more complicated than is understood in common rhetoric. Talking about a post-truth era as the new chapter of politics is misleading. The history of politics is full of propaganda, modifying opinions or indoctrination, lying, representing facts in a light that is most positive for oneself, and presenting competing narratives about exactly the same events (Korvela & Vuorelma, 2017, p. 18). But there is still something new behind the post-truth era, namely deep changes in modern society: growing pluralism. Instead of living in uniformity, we live in a “world of differences”. David Weinberger (2011, pp. 89–90) sums up the logic of a “world of differences” in the following way:

- *All knowledge and experience is an interpretation.* Our experience of the world is always from a point of view, looking at some features and not others.
• **Interpretations are social.** Interpretation always occurs within a culture, a language, a history, and a human project we care about.

• **There is no privileged position.** There are always many ways to interpret anything, and none can claim the single best way out of its context.

• **Interpretations occur in discourses.** You can’t make sense of something outside of context.

• **Within a discourse, some interpretations are privileged.** If you are within the discourse of science, fact-based evidence carries special weight, and emotions do not.

These theses based on postmodernist theories (Weinberger, 2011, p. 89) exemplify the common tendency to correlate the post-truth era with relativism. But there are many problems in this correlation. One bias is that relativism is interpreted as the rejection of truth altogether. It is stated that relativism is somehow “guilty” of the emergence of the post-truth era. This claim is often based on the supposition that relativism destroys the difference “between good and bad, right and wrong, and better and worse alternatives in particular domains of inquiry across different frameworks” (Baghramian, 2019). This claim is not only based on erroneous interpretation, but it is also historically and sociologically problematic. There are no causal links from epistemological relativism to the “maxims of the post-truth era”; that you can lie, you do not need to believe facts, your feelings tell the “truth,” you do not need to care about rational argumentation or evidence, etc. Even the most radical postmodernism is against this kind of interpretation of its thesis that all frameworks are equally good (cf. Lyotard, 1984). The thesis does not give permission to lie!

It is stated that to propagate the concept of absolute truth is the best service we can do to block the post-truth era.² I do not think so, because the problem is not in the concept of truth, but in the attitude not to care about truth. Besides, because absolute truth is not attainable, its propagation might strengthen frustration towards pursuing truth.

Truth is taken seriously in relativism. According to relativism, there is no absolute answer about whether a belief is true because truth-value is relative to points of view. But every statement has a definite truth-value in each point of view. Therefore, to evaluate the truth of a statement, one has to identify a point of view behind it. When a point of view is identified, every statement is true or false. A statement that is true from the point of view of a speaker might be false from the point of view of an evaluator. Often this situation is interpreted so that a person considers the statements that are false from her point of view to be lies.

It is important to make a clear difference between lies and relative truths. A statement of a person is a lie if she is talking against what she believes (knows) to be true. In the era of post-truth, we have to stress the importance of obtaining truth. I refer to the “supermaxim” of Grice (1989) presented already in Chap. 2: Try to

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²In Finland, there has been a debate among philosophers about which kind of truth theory is the best in a fight against the post-truth era (the correspondence theory?) and which is partially guilty of this dangerous phenomenon of the modern society (the pragmatistic or relativistic theory?).

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make your contribution one that is true. It contains two parts: Do not say what you believe to be false, and do not say that for which you lack adequate evidence. Communication must obey truth: tell the truth, look for evidence for all you believe and say. This maxim is central in epistemology in general, independent of the theory of truth one is supporting. Truth is a value: “it is good to believe what is true” (Lynch, 2005, p. 12). In critical relativism, the maxim gets an additional feature: communicate so that your point of view will be clear to the audience.

The epistemic virtues of critical relativism are a good protection towards the misinterpretation of the plurality of modern society. Because modern societies are more pluralistic than previously, it has become difficult for people to understand and manage the situation in which there are many viewpoints. It seems that there is no truth anymore. People do not realise that they have their own viewpoint from which they evaluate different opinions in public discussion. Still, there are many beliefs that are shared by a community. We can talk about a common opinion—it consists of the beliefs considered to be true in a community (cf. C-truth and C-invariance). A belief is a fact (cf. e-fact) in a community if it is in agreement with the common opinion. In terms of viewpoint logic, a common opinion consists of invariant beliefs, which are true from “almost all” points of view. By “almost all” I mean that people know the points of view of their near community and compare their own opinion to the common opinion in their near community. Then if some opinion is in contradiction with the common opinion, it is easily condemned to be a lie.

In his book *The Common Good* (2018), Robert Reich presents that society and democracy need to trust in a public truth. By public truth, Reich means the fact that “what is happening around us that could affect our well-being, as well as clear logic about the significance of those facts and reasoned analysis about their practical consequences” (p. 156). If we exchange facts for lies and logic for illogicality, we lose our shared world and our ability to solve our common problems. It is dangerous to normalise lying, Reich warns.

The status of scientific knowledge is intricate in this context. Scientific research is in many ways the superior way to produce reliable knowledge. The criticality of science prevents dogmatism, and continuously openly testing findings helps to eliminate unsound hypotheses. Scientific knowledge accumulates despite temporary setbacks. However, we should also clearly state that the scientific method is not able to produce absolute or certain truths. Each scientific theory and finding can turn out to be false or inadequate (fallibilism). In addition, there are many contradictory approaches and hypotheses to the same questions. Therefore, science itself reflects uncertainty and pluralism. This means that we cannot use scientific knowledge as a measure of what is really truth. Instead, the concept of truthlikeness might be useful here: Scientific knowledge is, in any case, more true in relation to its own points of view than, say, the common opinion (cf. Niiniluoto, 1987).

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3 The anonymous referee of my book suggested the norm “believing the truth is out epistemic duty.”
The post-truth era is a societal slogan that we have examples of, but that nevertheless cannot be generalised. Trust in science is still considerable, and political decision-making is mostly based on expertise and research. Western democracies have free press and a high degree of freedom of speech that allows for different opinions, but also for their criticism. Social media is a freeway for manipulating information, but also a place to have critical discussions and dialogues in.

8.1.2 Networking Expertise

The postmodern era is characterised by a lack of trust in authority. We can especially see this in the changed status of expertise. In the modern era (the Enlightenment), expertise was appreciated, but now there is a lot of suspicion towards experts. Expertise has a long history, from pre-historic status expertise to modern networked expertise. In the Middle Ages, expertise was centrally focused on the Church and its offices. During the same age, the master and apprentice system was used to create and maintain professional expertise. Later, during the Enlightenment, an extensive humanistic university expertise started to develop, partially displacing the expertise of the Church: Education and reason replaced faith. The industrial revolutions elevated scientific and technological expertise to the level of humanistic expertise, and partially even above it.

Modern expertise, where research experts and professional experts are separated, was established in the twentieth century. Researchers produce new knowledge that professionals apply. Expertise was then further divided into specialists, and the division of labour of experts was intensified. Expertise also gained hierarchical features (seniors and juniors, chief physicians, etc.). Experts united and defended their exclusive rights to practice their professions (lawyers, accountants, estate agents, electricians, etc.).

At the end of the last century, the status of professionals started to change again. Societal problems were even more complicated and difficult to solve. No single professional or expertise could master a whole. The technical language of experts is no longer registered. Experts are now blamed for being biased and for making serious errors of judgement, a famous example of which is the 2008 financial crisis.

The most significant factors that have changed expertise in the last couple of decades are digitalisation and data networks. Big data and the global networking of people have opened up new opportunities for creating knowledge and for innovation (cf. Chesbrough, 2003). Although there is hype, exaggeration and fear about the Internet, the new technology still creates new forms of expertise. One such is the “wisdom of crowds” (see Surowiecki, 2004). This means that a group of people knows more than an individual does, and that together, a group can come up with solutions that an individual is unable to. Weinberger expressed this aptly: “Networks of experts can be smarter than the sum of their participants” (2011, p. 62). Networked expertise differs in many ways from a traditional expertise. Of course, experts have always networked and communicated with each other in, for example, professional
associations or conferences. Traditional experts published books and articles that were repeatedly reviewed and vetted, or experts were chosen based on strict criteria (ex. physicians, teachers and judges). The new networked expertise lives in a network and in the “cloud,” so the experts are somewhere, but we do not necessarily know them personally. We communicate with them through cloud services.

Networked expertise breaks down barriers, questions justifications and conclusions, and is multifarious, open and multivoiced. The Internet connects a large amount of people, who can be very different from one another. Weinberger (pp. 59–60) also emphasised that the Internet is cumulative, because the amount of knowledge keeps growing, and especially because it links up. The field of knowledge increasingly grows, partially even exponentially (hyperlinks), through linking information from different, distributed sources.

Networking leads to a new kind of concept of distributed cognition. Knowledge is created through the collaboration of many players, with cognitive resources distributed over the network. No one person has sufficient resources on her own. In addition to people (experts), there are different instruments (measures, telescopes, etc.) and computational units (computers, robots, etc.) in a network. When these human, computational and physical resources are combined, they create a distributed cognitive system (see Giere, 2006, p. 113).

Such systems incorporate various sorts of humanly produced artifacts, both material and abstract. And these artifacts typically incorporate a built-in perspective on the world. Beginning with an understanding of scientific knowledge as produced by distributed cognitive systems, therefore, one comes quickly to the conclusion that scientific knowledge is perspectival. (Giere, 2006, p. 116)

One source for the concept of distributed cognitive systems is Bruno Latour’s concept of hybrid systems, which are combinations of humans and nonhumans (actants) (Latour, 2002).

8.1.3 The Debate on the Social Meaning of Truth

Philosophers disagree on what the social position and meaning of objective truth is. Objective truth is independent of people’s opinions, and objective factors make it true. It is therefore a question of an intuitive concept of truth, such as I discussed in Chap. 2. We can make a differentiation between two positions on the societal meaning of objective truth: objectivism and scepticism. According to objectivism, objective truth is independent of points of view, obtainable and socially valuable. According to scepticism, the pursuit of an objective truth is in vain and even socially harmful.

Both these conceptions have an epistemological and an axiological side. They are epistemological because they take a stand on the possibility of an objective truth (obtainable or in vain). They are axiological because they value the societal meaning of an objective truth (valuable or harmful). I will now compare the conceptions
of the societal meanings of truth by an objectivist, Karl Popper and a sceptic, Gianni Vattimo.⁴

Popper’s book, *The Open Society and its Enemies*, has achieved the honour of being considered a classic (published in 1945). It is a strong defence of objective truth and realism. In his book, Popper developed the philosophical position that he calls critical rationalism, which defends the bold use of reason and opposes totalitarian movements. By objective truth, Popper means a truth that is independent of people. In order to understand objective truth, it is important to know that a claim can be true even if we do not have justifications for it. Popper emphasises that the truth and the criteria for truth must be clearly separated. We do not necessarily have criteria to separate truths from untruths. This does not make pursuing the truth unimportant (Popper, 1966, pp. 720–725).

Popper called his own epistemology critical rationalism:

> I use the word “rationalism” in order to indicate, roughly, an attitude that seeks to solve as many problems as possible by an appeal to reason, i.e. to clear thought and experience, rather than by an appeal to emotions and passions. (p. 420)

What makes critical rationalism special is the conclusion it makes from fallibilism that we must admit that we can be wrong while others are correct. Therefore, “rationalism is an attitude of readiness to listen to critical arguments and to learn from experience” (p. 420).

Popper’s views on the subject have socio-political consequences. Every person has the right to be heard and to defend her standpoints. “The other fellow has a right to be heard, and to defend his arguments” (p. 433). Society must be tolerant of different opinions. For this, we need societal institutions: “Rationalism is linked up with the recognition of the necessity of social institutions to protect freedom of criticism, freedom of thought, and thus the freedom of men” (pp. 433–434). This is a question of the basic rights of a liberal democracy, which Popper assigns an “epistemological” basis.

Popper strongly criticised authoritarianism and absolutism. Authoritarianism manifests as the belief that one knows the truth or has an infallible and absolute method of gaining certain knowledge outside of doubt. Popper also opposed intelligent and moral relativism, which he considered to be the most philosophically serious disease of our time. By relativism, Popper means the view according to which “the choice between competing theories is arbitrary… since… there is no such thing as objective truth” (p. 720). According to Popper, relativism leads to not being able to solve which contradictory theory is true, even when one of them must be true (or truer) according to the objectivistic view of truth. Seeking an objective truth drives us to solve contradictions, in a way: We cannot resign ourselves with contradictions or stop the accumulation of knowledge. The best, if not only, way to solve contradictions is to test each belief and theory in the spirit of fallibilism.

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⁴Sir Karl Raimund Popper (1902–1994) was an Austrian-British science and social philosopher who was significant to the development of analytic philosophy. Gianni Vattimo (born in 1936) is an Italian politician and represents hermeneutics and postmodernism in his philosophy.
Vattimo used in his book *A Farewell to Truth* (2011) Nietzsche’s, and especially Heidegger’s, philosophies as his theoretical basis. According to them, truth cannot be the correlation or adequacy between beliefs and an objective reality. Truth is the opening or aperture of the world, and the disclosing of Being, as Heidegger has proposed. Truth always includes an interpretation of the world from a certain horizon.

According to Vattimo, objective truth is destructive to democracy. In his defence of this thesis, Vattimo appeals to Heidegger, writing,

> If true Being were only that which is objective, quantifiable, and given once and for all like the Platonic Ideas… our existence as free subjects would have no meaning; we could not say of ourselves that “we are,” and on top of that, we would be exposed to the risk of totalitarianism. (p. 5)

I interpret this to mean that science that pursues an objective truth objectifies a person (Being) as an object and does not catch the freedom of people. This is characteristic of metaphysics. “If Being is a structure given once and for all, neither any aperture on history nor any liberty is thinkable” (p. 15).

Totalitarianism maintains a special place in Vattimo’s argument, and that is about the relationship between politics and democracy. If politics is based on an objective truth, then its control is passed from the citizens to the holders of this objective truth, whether they be Platonic philosopher kings, experts, technocrats or ideologists. This leads to totalitarianism, where one truth dominates and other truths are not tolerated.

Because according to Vattimo, there is no objective truth, we must accept the pluralism that is created when reality is interpreted in different ways and approached from different horizons. This means that we must disassociate ourselves from all attempts to establish politics in a discipline, whether it be philosophy, social policy or economics. “If there were an objective truth to social and economic laws… democracy would be an utterly irrelevant choice” (p. xxxiv). Establishing politics to an objective truth makes having a democracy a completely irrational choice. Politics can also not be established to value-objectivism: No one can claim to know the truth about values and human rights.

Truth as absolute objective correspondence, as ultimate instance and the fundamental value is more of a danger than blessing. It paves the way to the republic of the philosophers, the experts, the technicians, and at the limit the ethical State, which claims to be able to decide what the true good for the citizens is even in defiance of their own opinions and preferences. Whenever politics purports to seek truth, there cannot be democracy. (p. 9)

Vattimo recognises the conflicts of interpretation within pluralism, but suspects that they would not be solved even if we made the interests behind the interpretations visible. He thinks the solution of a conflict situation is based on citizenship, friendship and communal sharing that does not include talking about the truth. Dialogue is necessary, but should not include pursuing an objective truth: A dialogue in itself is valuable and strengthens the sense of community. When a dialogue pursues an unequivocal truth, it creates conflicts and struggles for power, Vattimo warns.
When we compare the views of objectivists and sceptics, we can see both similarities and differences. Both Popper and Vattimo oppose authoritarianism and totalitarianism. Both accept a critical attitude about all truths (fallibilism). But where Popper sees objective truth as an instrument of social criticism, Vattimo sees it as the enemy of democracy. Vattimo accepts postmodern pluralism, and considers it to make way for politics. Popper, meanwhile, criticises “relativism” for settling for contradictions rather than trying to solve them. This means that knowledge does not accumulate and that attaining the truth is endangered.

In terms of viewpoint relativism, we can make critical observations about both “schools of thought.” The problem of objectivism is a too simple conception of the reasons for societal contradictions and pluralism. Objectivism cannot offer a convincing theory about pluralism. Pluralism does not mean that there is a set of more or less true conceptions of the world. If it did, the “problem” of pluralism could be solved by weeding out untruths (fallibilism) or by finding better justifications for views. An objectivist does not understand that different points of view are not simply different opinions, but rather different conceptions of the truth, justification and the nature of reality; different points of view provide different answers to epistemological questions. Points of view are different value choices in themselves. These differences cannot be solved by appealing to an objective truth or by measuring how far each is from the objective truth (truthlikeness). Meanwhile, a strength of objectivism is being able to critically weigh different paradigms in terms of objective truth: Each current “truth” can turn out to be untrue. Truth is an important objective for society, and contradictions are often signs of mistakes that must be eliminated, but not always because there are faultless disagreements.

The problem of scepticism is that it has insufficient methods for presenting social criticism. If we cannot appeal to the truth, then social discussion is easily dominated by opinions. If we consider pluralism to be the normal state of society and accept the incommensurability of different language-games, as Lyotard (1984), for example, does, we must accept all the ways of thinking and language-games regardless of their “usefulness,” not to mention their truthfulness. The danger is a societally weak anything-goes attitude. However, Vattimo does not reject the concept of truth, but for him, truth is not correspondence, but rather a shared horizon: “The epistemological precondition of social and intercultural dialogue is precisely this truth of horizon, which politics has the task of grasping and attempting to make explicit and to construct” (p. xxxiii). Politics needs a horizontal consensus.

Sceptics’ strength is that they reject authoritarianism. Speaking in the name of truth may actually conceal a one-sided view of things. According to Vattimo, the concept of an objective truth is even harmful. If politics is based on an objective truth, then it transfers the power from citizens to the possessors of this objective truth. This leads to totalitarianism, where one truth dominates, and other truths are not tolerated. However, Vattimo does not take it into account that acknowledging an objective truth is not the same as proclaiming an absolute truth. Popper’s fallibilism leads to critically assessing all “truths” without, however, denying the possibility of an objective truth.
Vattimo’s criticism about expertise seems to be based on the thought that experts tell society what to do. Then, experts would claim the role of a politician. But if experts keep to their roles and only tell us how things are and what political decisions can lead to, then politics will continue to be politics, meaning it sets societal objectives. But it is clear that the relationship between facts and norms is very complex, and they cannot always be separated from one another. Let us examine this relationship through practical inference (practical syllogism).

Practical inference is a method of inference, where actions are deduced from objectives and methods (von Wright, 1971, p. 96). Using it, we can explain political decision-making in the following way. Let A be a social agent like a government or parliament, p a political target, and a an action like a reform.

1. Agent A intends to bring about p.
2. A considers that he cannot bring about p unless he does a.

Therefore, A sets himself to do a.

Societal values influence what kinds of objectives are set in politics (premise 1). This is where political consensus comes in. Premise 2 is in a key position here and is based on knowledge of the present state and the evaluation of the effectiveness of different measures. It is specifically premise 2 that is based on what is considered to be true. An objectivist believes that we can attain a consensus on methods, or the technical norms, because they are factual (see von Wright, 1963). A sceptic, meanwhile, emphasises that because phenomena can be interpreted in many ways, there is no way to gain agreement about the different methods. Pluralism then rears its head in politics both in setting objectives and in choosing methods.

In terms of viewpoint relativism, both objectivism and scepticism are one-sided conceptions. There is a clear need for an epistemological approach that accepts epistemological pluralism, and at the same time presents methods to critically compare and coordinate different approaches. Critical relativism answers this need, combining plurality, tolerance and criticality. Critical relativism fits somewhere in the middle of objectivism and scepticism. Where an objectivist believes that all differences in opinion are solved by searching for an objective truth, critical relativism accepts that we can disagree and still be correct. While scepticism denies the political meaning of the truth, critical relativism emphasises seeking the truth, but sees it in a pluralistic way. Supporting pluralism does not mean accepting all opinions. We can strive to reach mutual understanding and mutual learning in an authentic dialogue.

### 8.1.4 Points of View Meet in Dialogue

The actions and development of society are centrally based on human communication. A dialogue is a conversation and interactive communication between two or more speakers. The dialogue method has a long history, but it largely became known through Plato’s writings. In many of Plato’s dialogues, Socrates has conversations...
with the educated of the time. In Socrates’ dialogues, the conversation partner’s limited scope of information is revealed through clever questions. Essential for Socrates was the correct way to phrase a question, rather than revealing ultimate truths (cf. Kakkuri-Knuttila, 2014). Many philosophers (ex. Martin Buber, Hans-Georg Gadamer, Jürgen Habermas and Emmanuel Lévinas) and experts of different fields have used and developed the dialogue method in the twentieth and twenty-first centuries, in themes such as leadership, education and learning, communication, creativity, problem-solving, psychology and science studies.

The word dialogue has its roots in the Greek terms of *logos* (speech, meaning, knowledge, wisdom) and *dia* (through). According to Bohm (1996), dialogue is a stream of meaning flowing among and through us and between us. It is communication and the exchange of different points of view, in opposition to monologue. It is an open, equal and confidential discussion. The meaning of such a dialogue can be summarised in two points (Hautamäki, 2018b, p. 25):

- **Common ground:** Since everyone has their personal perspectives, mutual understanding is necessary. This can be found by means of a dialogue.
- **The richness of diversity:** Since backgrounds and competences differ, the combination of participants creates a bigger and richer whole. Diversity creates multidimensionality that is brought together in the dialogue.

Dialogues centrally involve the richness of different points of view and confronting them. According to Kai Alhanen, the starting point to a dialogue is living in the same world:

> People share a common world, which appears to an individual both similar and different. Things that appear the same for everyone create a strong basis for life: a shared reality and values that guide our lives. However, the individual experiences of the same situations differ. These different experiences are both scourges and assets. They divide people and lead to confrontations when dealing with common affairs. On the other hand, to experience differences allows people to learn from each other and to expand their understanding of the common world. (2016, p. 25)

Each personal experience of the world is always different and unique. Because of this, people make different interpretations of and give different meanings for even the same phenomena and things. The purpose of a dialogue is to express the differences in the experiences of these meanings.

I will now further examine David Bohm’s conception of a dialogue that he presented in his book *On Dialogue* (1996). A dialogue is a way to explore the roots of the many crises that face humanity today. The objective of a dialogue is to find and share the common meanings that constitute culture. In a dialogue, we are looking for a mutual understanding. Each person has more or less strong and conscious opinions and assumptions. We are inclined to defend our opinions if they are challenged. Our defence stance prevents us from hearing and understanding others. This is why a dialogue cannot be a fight or winning:

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5 Translation borrowed from Hautamäki (2018b, p. 25).
The object of a dialogue is not to analyse things, or to win an argument, or to exchange opinions. Rather, it is to suspend your opinions and to look at the opinions — to listen to everybody’s opinions, to suspend them, and to see what all that means. If we can see what all of our opinions mean, then we are sharing a common content, even if we don’t agree entirely. It may turn out that the opinions are not really very important — they are all assumptions. (p. 7)

Concrete objectives also destroy dialogue. According to Bohm, it is not the objective of a dialogue to directly solve problems, but to lead people with different ways of thinking to come together to create shared meanings (p. 5). In all of the applications of the dialogue method, the necessary condition to succeeding is the equality of conversation. Nobody starts off correct.

In terms of the viewpoint theory, different points of view meet in a dialogue. Points of view are revealed in the opinions and assumptions of people. A dialogue can be seen as a method where people become conscious of their own points of view and those of others’, and learn to find the shared experiences and meanings behind them. The conditions of a successful dialogue are:

- the realisation that people have different points of view;
- the realisation that your own point of view is only one among many;
- the ability to objectify your own point of view;
- the ability to conceptualise the interests, experiences, and cognitive and emotional elements behind points of view;
- listening to others and trying to understand their points of view;
- comparing points of view (what are their effects, how justified are they);
- the ability to learn from others’ points of view;
- and the rejection of absolute points of view.

Note that epistemic virtues of viewpoint relativism (plurality, tolerance and criticality) discussed above are in the core of these conditions.

The philosophy of a dialogue focally includes an open outlook about the results of a dialogue. It is usually not possible to create all-encompassing syntheses from different points of view. At its best, a dialogue brings different points of view together and helps to find beliefs that are invariant in terms of different points of view. In a well-functioning dialogue, the participants start to understand each other’s points of view, and start to recognise the things that they agree on. This creates a way from which to approach solving disagreements.

8.2 Epistemic Disagreements

One of the central theses of epistemological relativism is that we can justifiably disagree. Therefore, faultless disagreements exist, which means that the disagreement is not caused by one party being right, and the other wrong. However, this thesis does not justify us to consider all disagreements to be faultless. There are many different kinds of disagreements, and their solutions can be very different. It
is good to ask what the disagreements are based on or where they come from. In this last section, I will analyse the sources of disagreements and consider different ways to solve them.

It is important to differentiate between disagreements about beliefs and disagreements about the justifications of beliefs. Disagreements about beliefs could be:

(A) Mary believes that the train departs at 17:30.
(B) Peter believes that the train does not depart at 17:30.

Disagreements about the justifications of beliefs could be:

(C) Mary believes that the train departs at 17:30 because that is what the published timetable says.
(D) Peter believes that the train does not depart at 17:30 because the daily news said that all trains will be late.

In cases (A)–(B), we would say that either Mary or Peter is correct. The disagreement in cases (C)–(D) is about justifications rather than beliefs. In this case, the disagreement is not an either–or case, but rather about the quality of the justifications. The disagreement moves to a metalevel from the “basic level.” The metalevel disagreements about acceptable justifications are actually the subjects of epistemology.

Michele Palmira (2017, pp. 287–291) has differentiated between four kinds of disagreements.

Descriptive disagreement is about how to describe the state of affairs. For example, Mary and Peter are in disagreement about how equal women and men are in Finland.

Conceptual disagreement is disagreement about what entities a concept should refer to. For example, Mary and Peter disagree about what equality means.

Full disagreement is what happens between opposite beliefs. For example, Mary and Peter’s beliefs about the departure of the train in cases (A)–(B) are in full disagreement.

Credal disagreement means that the beliefs have different levels of confidence (degrees of beliefs or credence). For example, Peter’s belief can be considered more trustworthy than Mary’s, because Peter’s belief (D) is based on news from that very same day, while Mary’s (C) is based on a previously published timetable.

How to solve a disagreement depends on what kind of disagreement is in question. Descriptive disagreements lead to a more detailed analysis and description. They are probably solved by obtaining more information about the subject. In science, descriptive disagreements are often disagreements within the same paradigm.

Conceptual disagreements are often linguistic disagreements about the definitions of concepts. By making our own definitions explicit, we can solve many conceptual disagreements. Often public disagreements are conceptual, and solving them is made more difficult by the fact that defining basic concepts easily leads to
circular definitions. The definition “justice means fairness” connects justice to fairness, while fairness is defined by referring to justice.

A full disagreement can be solved if we can demonstrate which of the opposite claims is true and which is untrue. This can be done by appealing to “known” facts; for example, to observations or facts that have already been proven. This is sometimes possible, but often we must also weigh the strengths and weaknesses of the justifications. When we weigh different justifications, we arrive at gradual disagreements: The observation of many people is more trustworthy than that of one person; a scientific report is more trustworthy than the report of an expert through experience, etc. What makes this more difficult is that the more holistic information systems are, the more difficult it is to unambiguously show which belief is untrue (cf. Quine, 1960, 1990).

Credal disagreements elevate the discussion to a metalevel in order to consider what justifications beliefs have been given, and how these justifications should be weighed and prioritised. We must consider what kinds of sources of knowledge and evidence, such as observations, experiences, logical conclusions and intuitions, have been used, and what methods of justification best lead to the truth or other desirable characteristics (goods) of beliefs. Although there are some priorities that people agree on, we cannot avoid discussions on epistemic pluralism and relativism.

Disagreements are not only rational, but different attitudes are also attached to them, and changing them is not easy. Each party of a disagreement has a certain conscious or “doxastic” attitude about the subject of the knowledge. Sometimes these doxastic attitudes are incompatible in the sense that person A cannot adopt person B’s doxastic attitude without arriving at internal conflict. Palmira uses doxastic attitudes to define what disagreements are:

\[ A \text{ and } B \text{ disagree if and only if } A \text{ cannot coherently adopt } B\text{’s doxastic attitude towards } p, \text{ and vice versa.} \] (2017, p. 295)

This means that disagreements are strongly anchored to the beliefs and preferences of a person: they are even existential stances. Adopting the view of another means renouncing one’s own even well-justified position.

### 8.2.1 Disagreement Based on Points of View

Viewpoint relativism emphasises the idea that there is no viewpoint-independent neutral way to approach any phenomena. This means that we must be aware of points of view. Instead of aiming for viewpoint-neutrality, we must develop viewpoint awareness. This is the foundation of critical relativism, which is a question of the analysis of points of view and recognising the choices behind them.

What I have previously said about disagreements applies to disagreements on points of view. Additionally, including points of view in disagreements brings forth some special characteristics that are good for us to be aware of. In a point of view, some feature (aspect) of an object is selected to represent it. The choice can be
based on many different factors, but often is based on the meaning of the feature in terms of the person’s interests. Then the person prioritises the feature, or sets it above the others, considering the feature to be more important or more essential than the others.

The basic type of disagreements based on points of view is formed when two subjects use different aspects to represent the same object. For example, one person can examine the economy from the efficiency of resources, and the other can examine it from the allocation of resources. Then even contradictory claims can be true from different points of view. As an example, let us consider women’s equality compared to men.

A. Women are equal to men.
B. Women are not equal to men.

Claims A and B are contradictory, and according to the principle of consistency, only one of them can be true. But if we consider points of view, then both can be true.

C. Women are equal to men [in terms of the constitution].
D. Women are not equal to men [in terms of wages].

C and D could both be true. As we know, claims A and B provoke passionate discussions and arguments about the equality of the genders. In terms of the viewpoint theory, we can try to solve these disputes by identifying the points of view that the contradictory claims are often presented from. Of course, solving disagreements by bringing out the points of view behind them does not necessarily lessen the pressure that seems to be associated with doxastic attitudes and especially the hierarchies of things.

I have defined viewpoint relativism as an epistemic hypothesis, according to which viewpoint-dependent epistemic questions exist. With this, we can determine when disagreements are viewpoint-dependent. For the sake of simplicity, let us assume that a disagreement is about the truthfulness of statement p.

The disagreement about a statement p is viewpoint-dependent if p is true (or justified) from the point of view of a proponent but false (or unjustified) from the point of view of an opponent.

### 8.2.2 Changing Points of View in Disagreements

Disagreements about justification of beliefs are hard to solve. According to my analysis justification is dependent of epistemic systems and they are dependent on epistemic points of view (Sect. 5.3). This means that disagreement is, at bottom, about points of view, and their choice is a matter of stance (possession conditions). I have rejected equality thesis and defended no-neutrality thesis. This means that that there is no neutral way to settle conflicts of epistemic systems, but still different epistemic systems can be compared and valuated against points of view. As a case study how
these ideas operate, I take Delia Belleri’s (2017) analysis of ontological disagreements. The question is a dispute about whether combinations of objects, in addition to normal individual objects, are also objects.6 There are three basic positions on this dispute. According to nihilism, only simple entities exist. There are two opposing positions. According to the common sense position, the composite objects (houses, cars, etc.) that we observe exist, but this is not assumed for non-normal entities. According to universalism, there are combinations everywhere, and they are real. The common sense position follows from universalism.

Each of these theories present many different kinds of justifications for their positions. For example, nihilism is defended with the causality argument: If a macrophysical entity exists, it must have causal power (ontological parsimony). But if this kind of an entity is a combination, then its causal power can be completely explained by the influence of its parts, where, in terms of causality, combinations are not necessary. These positions also have different kinds of sources of knowledge. For example, the common sense position appeals to ordinary perceptual experience, while nihilism appeals to theoretical simplicity.7

Belleri differentiates between two different angles of the composition dispute. In an external angle, one takes a position above or outside of a dispute, trying to take as neutral a position as possible about the dispute. In an internal angle, the person is a part of the dispute as a participant. An internal angle pays attention to the epistemic system adopted by each participant, which has priorities characteristic to each. An external angle is based on a maximally shared epistemic system between the disputants. It consists of “the background standards, principles and requirements that they all acknowledge and presuppose, relative to which epistemic support can be asserted” (p. 321). According to Belleri, to rely on the shared epistemic system does not often lead to finding a solution.8 If a person is internally in a dispute and a participant of it, then she must be committed to her own perspective. From her point of view, her theory is justified and the evidence supports it. If they stay within a shared epistemic system, then the participants cannot convince each other of the superiority of their own priorities.9 Belleri defends the following thesis:

There are insufficient grounds to adopt any of the competing theories if the dispute is considered from the external angle. However, if an internal angle is adopted, there might be conclusive grounds to endorse any of the views. (p. 321)

This thesis means that when a dispute is considered neutrally and externally by leaning on the maximally shared epistemic system, then the dispute cannot be

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6 This is a “mereological” dispute of the reality of compositions. Although a mereological dispute is discussed here, Belleri’s analysis also applies mutatis mutandis to other philosophical and theoretical disputes.

7 Belleri (2017, pp. 318–319) shortly presents a group of these principles and arguments that affect debates.

8 Note that in the external angle, a “maximally shared epistemic system” refers to epistemic standards that all participants agree on, so it is a narrow system.

9 Of course, this does not exclude the possibility that someone’s taste or stance simply changes and she changes her perspective. But this is probably very rare.
solved in favour of anyone. Belleri calls the ways to valuate and order epistemic principles epistemic perspectives, i.e. epistemic points of view. The point is that there are many perspectives in a dispute, and they are not shared by the participants of the dispute. When one perspective has been chosen, it is completely possible that the evidence E for it supports one position of theory T better than it does others. Then, according to Belleri, we can say that a theoretician is internally justified in believing T:

Internal justification for a theory T about material composition obtains if there is a perspective P (containing, for instance, ranking of theoretical features and virtues) against which the evidence E (consisting mainly of first-order arguments and intuitions) supports T over other alternatives. (p. 327)

Of course, the pluralism of perspectives is real in almost all profound disputes. It can be relevant to ask if we can assess the goodness of perspectives. Prioritising perspectives is always a theoretical choice that is in itself perspectival. Prioritising different approaches and perspectives externally and neutrally does not work. Of course, metaphysically, we could think that some perspective best leads to the truth, but this cannot be solved methodologically. This is why Belleri defends epistemic methodological relativism (pp. 335–337). According to it, all perspectives should be considered as if they are equally as good. This means that all of the participants of a dispute are internally justified in terms of the perspective they have adopted.

It is rational to adopt epistemic methodological relativism if the situation of an epistemic disagreement is closed in the sense that a) the evidence is stable and codified (no new evidence is available), b) methods are given (no new methods are invited), c) features of epistemic systems are fixed (epistemic principles are well known and (partly) shared), and d) parties are strongly (existentially) committed to their own points view. In this kind of position the disagreement is unsolvable. But if epistemic position is open and changing, there are ways to solve epistemic disagreements. The following options show that we are not everlastingly tied to our current points of view (cf. Belleri, pp. 337–339).

- **Projection**: Setting oneself to look at the debate from other’s point of view: starting to understand other’s position or even adopt it.
- **Ascending to meta-level**: World is not closed and we can learn new things, get new evidence, invent new methods and compare our systems leading to a broader, shared meta-level epistemic system, where one theory is better than others.
- **Outsider’s point of view**: When you are an outsider in a disagreement, you could use your own (timely) epistemic system to evaluate the evidence pro and con theories under dispute.
- **Aspectual non-epistemic comparison**: Even when there is no neural meta-standard for epistemic evaluation, we could select a new (non-epistemic) aspect and compare different theories and perspectives according to it. Say, use practical consequences as a criterion of “goodness” of a theory or points of view.
In summary, epistemic disagreements are unsolvable in closed positions where epistemic environment is stable: all points of view are “equally good”. On the other hand, when epistemic position is open and we are looking for new evidence and compare points of view, we have possibilities to solve disagreements. Our ability to change points of view gives us reason to argue that there are no absolutely unsolvable epistemic disagreements.
Conclusions

Relativism has always been the enfant terrible of philosophy that has either been quietly sidestepped or rejected with reductive arguments. However, relativism captures some of the very elementary intuitions about human thought and knowledge. Humans are ineliminably subjective and view the world from their own points of view. We can genuinely disagree on many things. However, we are not prisoners of subjectivity, but can communicate and compare our points of view. Although we may not achieve unanimity, we can create a multifaceted image of the world and of humans as a part of it.

In philosophical discussions, the opponents of relativism often make it out to be a simplified “straw man” that they then try to disprove. Especially global relativism and extreme relativism are such exaggerated interpretations. Relativism is treated as a global theory that claims that everything is relative. It is difficult, if not impossible, to defend this kind of relativism, because it cuts the ground from under your own arguments. However, relativism can also be developed as a local pluralistic theory, according to which certain areas of knowledge have many ways to structure and emphasise phenomena. Relativism is often also rejected as the claim that all points of view are equally as good—“anything goes.” Almost no relativist actually supports this kind of extreme relativism. Because of this, many philosophers who are clearly relativists distance themselves from relativism and call their own theories by other names, such as pluralism.

This book is focused on the epistemological relativism that considers the epistemic questions associated with truth, knowledge and reality. The book is not just an analysis of the different forms of relativism, but also develops a new kind of viewpoint relativism. Viewpoint relativism is a moderate form of epistemological relativism with strong justifications. It is local relativism, and rejects extreme relativism. According to viewpoint relativism, many central epistemic questions are viewpoint-dependent, meaning that to answer them, we must refer to points of view. In order to develop viewpoint relativism, we must specify what the concept of a point of view means, which is one of the central objectives of this book. With the help of the concept of a point of view, viewpoint relativism can clarify many of the difficult
questions associated with epistemology, in all its aspects. Viewpoint relativism is also a promising approach for the philosophy of science, where perspectivism has become a noteworthy alternative to traditional realism. Viewpoint relativism also includes a critical approach to different ideologies. Critical relativism is ever more relevant in the current media environment where fake news competes with facts.

William Hatcher’s book *Minimalism* offers a starting point for developing viewpoint relativism. According to him, we always approach the world from our own point of view, and we cannot separate ourselves from our own point of view. In that sense, our point of view is always subjective. However, we can develop our point of view and make it public, or in Hatcher’s terms, we can objectify our point of view with the use of a common language. Some beliefs are invariant, they stay the same in relation to changing points of view. They are the basis of objective knowledge.

The central theses of viewpoint relativism are:

1. There is no viewpoint-neutral way to approach reality.
2. Points of view are subjective, but they can be objectified.
3. Each object can be considered from several different points of view.
4. There are no absolute, privileged or universal points of view.
5. Points of view are suited to be improved and changed.
6. Different kinds of criteria can be used to compare points of view.

All of the theses are important statements about the different features of relativism and the criticism against it. Of these, thesis 1 is the most basic. It does not deny the existence of an objective reality or the possibility of objective knowledge. Instead, it claims that we always approach the world from some point of view or perspective. Knowledge must always be set in relation to some point of view.

Many of the observations of the book are independent of a detailed definition of the concept of a point of view: A point of view can be a framework, a scheme, a worldview, etc. But in order to argue for viewpoint relativism, we must define the concept of the point of view more clearly.

There have been very general definitions for points of view. My Spanish colleagues Manuel Liz and Margarita Vázquez have analysed the concept of a point of view in a varied way. Of Finnish academics, Professor Tommi Lehtonen has systematically developed the viewpoint theory. While being conscious of their theories, I presented my own definition in Chap. 3, which I call an epistemic point of view.

An epistemic point of view is composed of three elements, which are the subject, object and aspect of a point of view. An aspect is the characteristics of the objects that the subject chooses to represent the object. The aspect is not just a set of “natural” objective characteristics, but some of the characteristics can be subjective or dependent on society. For example, a phenomenon can include something useful, desirable or scary for the subject. This aspect cannot be recognised by studying the object separately from the subject and her point of view. Meanwhile, the aspects dependent on society are based on societal institutions such as laws or the economy. Therefore, points of view have a constitutive power that broadens naturalistic ontology and provides new interpretations of reality.
Although people have different points of view of reality, they also have shared conceptions of reality and a shared language that they use to communicate with each other. I have summed these phenomena up in the concepts of C-language and C-reality. Philosophically, they are a certain kind of preunderstanding of the world that is necessary for the “environment” of philosophical argumentation, to use Wittgenstein’s phrasing. “C-theory” does not mean that we cannot be of very different minds on philosophical issues. Rather, we need C-language, C-truth and C-reality in order to disagree about things and to compare different points of view. C-theory is necessary to create an equilibrium between similarity and difference. However, I have to stress that my major arguments about the relativity of truth, knowledge and reality in Chap. 4, 5 and 6 are not dependent on C-theory.

As a philosophical theory, viewpoint relativism is the opposite of realism. While according to epistemological realism, we can have objective knowledge that corresponds to reality as it is independent of people and their conceptions, relativism emphasises the conceptualisation of reality. Relativism emphasises that the world can be structured in many different ways. The opposing nature of relativism and realism can be seen in all areas of epistemology, whether it be truth, justification, ontology, rationality or the philosophy of science. I will now shortly cover how viewpoint relativism is in relation to the different types of epistemological relativism.

Rational and logical relativism: Viewpoint relativism accepts core rationality, which especially includes the principle of deduction and the principle of consistency. The objective of core rationality is to make philosophical discourse and rational argumentation possible. Core rationality supports comparing different points of view. It is normative, which means that its principles are maybe not de facto followed, but following them is still reasonable. Although there can be very different forms of local rationality in different sciences and different cultures, it is still hard to think that rational discussion could in any way be possible without some level of a shared core rationality. Still, I do not claim that the core rationality that I have defined is universal.

Relativism about the truth: I thought that the relationship between the truth and relativism was an especially difficult question: Can relativism be defended without committing to an objective truth? Our intuitive conception of the truth (C-truth) includes the objectivity of the truth. What I arrived at was that although the statements that we make about the world are tied to some point of view or framework, their truth is their agreement with the aspect of the world defined or opened by the point of view. This agreement is objective, and we do not need to reject the intuitive conception of the truth. This concept of truth can be contextually defined by including points of view as a part of the context of use and assessment. John MacFarlane’s “new relativism” uses a similar approach. In my own analysis, I use the logic of points of view that I have developed.

Epistemic relativism about the justification of knowledge: According to epistemic pluralism, there are many different ways in which a statement can be justified. Epistemic viewpoint relativism emphasises that there are no neutral criteria for justifying knowledge. Criteria change with time, in different cultures and in different sciences. There are many “styles of reasoning,” as emphasised by Ian Hacking.
Justification is always made in relation to some epistemic system, which is a set of standards or criteria of justification. Choosing an epistemic system is a question of point of view. Although there are no neutral criteria for justifying knowledge, they can still be assessed and compared in terms of different objectives and interests. Core rationality supports this comparison.

Conceptual, ontological relativism: Viewpoint relativism accepts conceptual relativism, according to which reality can be structured in many different ways depending on the frameworks that are used. However, reality affects what kind of a picture the conceptual framework transmits of the world: Ontology is the function of reality and a framework. The viewpoint relativist conception of ontology differs from both metaphysical realism and social constructivism. Metaphysical realism assumes that the world can only be correctly structured in one way. Meanwhile, social constructivism tends towards nominalism, according to which reality can be structured in any way. A special point of contention is Hilary Putnam’s interpretation of internal realism. I demonstrate that internal realism does not significantly differ from John Searle’s external realism, especially after Putnam rejected the epistemic concept of truth.

Epistemological relativism also has important consequences for the philosophy of science. Scientific realism has held a central position in the philosophy of science. According to it, science aims to create an accurate description of the objective reality. Relativism questions the objectivism behind realism. Science is always perspectival, as the perspectival structuralism represented by Bas van Fraassen and Ronald Giere emphasises. According to them, theories are not descriptions of the world, but structures whose relationship to reality and especially to data is always partial and perspectival. The concept of a model also makes it possible to assess the correspondence theory that epistemological realism is based on. There have been attempts to defend realism by explicating the relationship between language and the world by using a Tarskian theory of truth. I show that this solution, however, requires postulating an already structured world.

The dominant philosophy of science has also been criticised for giving a distorted image of the objectivity of science and for not considering the presuppositions of doing science; for example, those to do with gender or power structures. Strong objectivity can only be constructed by approaching reality from different points of view, as the standpoint-methodology that Sandra Harding represents emphasises.

Those worried about the status of science might say that viewpoint relativism is a negative thing for science, as it creates doubts about science. It is my own view that there are always different points of view involved in science, and denying them would give a wrong picture of science. Science does not create absolute knowledge, it is always vulnerable to mistakes (fallibilism). Recognising the perspective of science makes it possible for science to make progress by studying things from new points of view. Because no point of view is perfect or definitive, the only way to approach the truth is to examine reality from different points of view.
The question of truth is not important only for science, but also has a significant meaning for society. The epistemic landscape of publicity is full of different points of view and the beliefs that arise from them. The epistemic landscape is obscured by the spreading of “alternative facts” and deliberate lies. The uncertainty emerging from pluralism has created a social desire for populism and authoritarian movements that claim to know the absolute truth. These kinds of claims are destructive for democracy. If no one knows the absolute truth, then the only remaining rational strategy is to critically examine different points of view and start a dialogue between points of view.

Critical relativism is based on virtues of plurality, tolerance and criticality. Plurality means recognising the diversity of different points of view and ways of thinking. Tolerance means listening to different or even opposite opinions and points of view. Criticality means weighing all points of view against their justifications, the interests behind them, and their impacts. The tolerance of critical relativism does not, therefore, mean accepting all opinions as they are.

In order to live safe lives and to solve the wicked man-made problems (climate change, inequality, persecution) that humanity faces, we must have a shared understanding and a common world. However, pluralism is what asks the question of how a shared understanding can be created in society. Objectivists such as Popper could answer that a shared understanding can be created by pursuing an objective truth independent of points of view. But there are also sceptics who think that we should not even pursue objective truth. Gianni Vattimo, who is a representative of postmodern thought, thinks that the truth is the enemy of politics and democracy. However, values and facts should be separated in this debate: values are political choices, facts are not.

Disagreements about facts fall within epistemology. Some disagreements are caused by mistakes, but there are some disagreements that are based on different epistemic systems. People are strongly committed to the epistemic systems that they support. This means that disagreements are often “existential” and that they are hard to solve. However, a solution can be sought by recognising the choices and points of view behind the epistemic systems and by participating in a dialogue. Different points of view meet in a dialogue, which is why in order for a dialogue to succeed, we must be aware of our points of view and highlight different points of view. In order to have an authentic dialogue, we must be open and everyone must be equal. A dialogue does not necessarily lead to a consensus, but even recognising that disagreements are based on different points of view helps people to live with pluralism. Beside, there is always a hope that people could change their points of view to reach a consensus.
Background and Acknowledgements

This book has a long background. When I was studying Marx’s dialectics at the beginning of the 80s, I arrived at the conclusion that dialectic contradictions are centrally about examining a phenomenon from two opposite, complementary points of view (Hautamäki, 1980, 1983c). This caused me to study points of view. I presented my own interpretation of them in my doctoral dissertation, Points of View and Their Logical Analysis (Hautamäki, 1986). Within it, I formalised the concept of a point of view by using the idea of a conceptual space. I have also presented definitions that rely on possible worlds’ semantics (Hautamäki, 1983b).

Considering dialectics and the concept of a point of view led me in a fairly straightforward way to consider the problematics of relativism. I then wrote an article entitled Epistemologinen relativismi [Epistemological relativism] (Hautamäki, 1985) for the journal Ajatus, where I approached relativism through logic and the model theory. We can see relativism in our ability to build different models of reality. The truth of statements is their truth in these models. I returned to this idea in this book.

I became interested in the problematics of points of view again at the beginning of the 2010s. There were many reasons for this. Professor Mauri Kaipainen and I noticed that we had both studied the perspectivity of knowledge. We were both using the framework of conceptual spaces, me on my own behalf, while Mauri had studied Peter Gärdenfors’ book Conceptual Spaces. We started collaborating, and have written several articles together since (Kaipainen & Hautamäki, 2011, 2015, 2017, 2019). Especially the research group headed by Manuel Liz, which studies points of view, has paid attention to my earlier writings on points of view. I started to collaborate with them, and further developed my own conceptions of points of view and published articles about formalising points of view (Hautamäki, 2015, 2016).

This book is an outline of the thoughts that I have about epistemological relativism and points of view. This English edition differs in part from the Finnish edition (Hautamäki, 2018a), due to the different audiences of these editions. In this study, I rely on the discussion on relativism held within analytic philosophy (e.g. the contri-
butions of Paul Boghossian, Donald Davidson, Nelson Goodman, Martin Kusch, John MacFarlane, Ilkka Niiniluoto, Hilary Putman and Richard Rorty). Pragmatists, especially John Dewey and Clarence Irving Lewis represent a more traditional approach, to which I owe a lot. Ludwig Wittgenstein is an important figure in the discussion on relativism, also in this book. My studies in the analytic tradition of the philosophy department at the University of Helsinki were an influence on why I did not broaden my research to continental philosophy, where relativism holds an important position (Jacques Derrida, Michel Foucault, etc.).

I would like to express my gratitude to many colleagues, whose comments at the different phases and versions of this book have been instrumental. I would especially like to thank the following academics in their thorough comments about the manuscript: Professor Mauri Kaipainen; Antti Karjalainen, PhD; Timo Laiho, PhD; Professor Tommi Lehtonen; Professor Arto Mustajoki; Academic Ilkka Niiniluoto; director Paavo Pylkkänen, PhD; adjunct professor Joona Taipale; and PhD students Ilmari Hirvonen, Ilkka Pättiniemi and Petri Turunen. Monumental to the English edition have been the conversations and workshops at the University of La Laguna, in Tenerife, that David Pérez Chico, Modesto González, PhD, Professor Steven Hales, Professor Andrés Jaume, María Ponte, PhD, Professor Margarita Vázquez and Professor José Zalabardo took part in under the direction of Professor Manuel Liz. My work is partly funded by grants of The Association of Finnish Non-fiction Writers and Spanish Government (RTI2018–098254-B-I00). I also had the rewarding opportunity to talk to Professor John MacFarlane in Berkeley and Professor Martin Kusch in Helsinki and Vienna. I would like to thank Juan Colomina-Almiñana, PhD, for his excellent advice and suggestion to submit the book to be published by Springer, and for the interesting conversations and comments about the relationships between epistemic and metaphysical points of view. Without Springer’s encouraging attitude towards my proposal, this English edition would not exist. I appreciate the ingenious comments of the anonymous referee of the manuscript, leading to important revisions in many parts of the text. Also comments by Manuel Liz was deep and useful in finishing the text. My great appreciation also to Michelle Mamane for the excellent and timely translation.
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