Rafael Ferber

# Key Concepts in Philosophy

## An Introduction

Translated from German
by Ladislaus Löb

ACADEMIA

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"To be useful as a foundation,
a textbook must contain no more
than the core of a science or art in
the briefest concentration so that
the teacher will easily find cause to
explain the topic concerned."

*Georg Christoph Lichtenberg*

# Preface

This book is addressed not so much to expert philosophers as to students of philosophy and interested laypersons. It aims to introduce the reader to six key concepts that provide a first understanding of the contents, methods and claims of philosophy. Being an introduction, it is elementary, but not unsophisticated. I try to elucidate those elementary issues clearly, simply and without the use of jargon. At the same time, I do not shrink from adopting a position of my own. My philosophy is indebted in several respects to the analytical school, but its spirit, in a broader sense, is Platonic in so far as it assumes that the concepts under discussion have meanings that are accessible to us all, at least to a certain extent. Some new aspects, which could also be of interest to professional philosophers, are found in particular in the chapters about knowledge, truth and the good.

The following people were kind enough to read and make critical comments on selected chapters: Hans Ambühl, Jean Louis Arni, Marcel Zentner. However, I also benefited from the help of the students and non-specialists I have had the privilege of teaching in recent years, and it is to them that I dedicate this book.

Sachseln (Switzerland), autumn of 1993                                    *R. Ferber*

## Preface to the English Translation

As a result of its warm reception, the book has now appeared in eight editions, the latest of which also provides the basis for this English translation. As well as a few minor additions, I have included a section about the problem of universals (pp. 155–166) and a reference to the power of judgment (pp. 210–215). I thank Ladislaus Löb for the translation and Elisabeth Longrigg for looking through most of the book. I wish to thank all those readers who have sent me suggestions for improvement or critical remarks, which I have taken on board as far as I could. I am also grateful to those colleagues who use the book or parts of it in their teaching.

Each entry of the footnotes begins with a reference to the texts used by the author. The abbreviations of many titles are designed to save space. Quotations from English-language texts are traced to the originals. Quotations from other languages are borrowed from existing translations or translations from the author's German translations.

Sachseln, August 2014                                    *Rafael Ferber*

# I. Philosophy

## 1. The Beginning in the Cave

At one time or another, you have probably sat in front of the television, watching the screen. You saw landscapes, animals, people and consumer goods. You heard news, reports and advertising slogans. Most of the time, you assumed that what you saw and heard was real. But is what you saw and heard real? If it is real, is it the whole reality? And what is real in any case?

I would like to begin with an image. It is by Plato, the Greek philosopher (427-347 BC). It casts doubt on whether what we see and hear is in fact real. According to this image, we humans live in a cave. Ever since our childhood, we have been bound by chains round our necks and legs. We are confined to the same spot and able to look only in one direction. Between us and a fire burning behind us runs a path. Beside the path there is a barrier. It recalls the screens that entertainers sometimes erect in front of their audiences, across which they show off their tricks. The entertainers walk along the barrier, raising all kinds of implements, statues and other images made of stone or wood above it. Some talk; others are silent. We, the captives, however, can only see shadows – of ourselves, of each other, of the objects being carried past behind our backs – projected by the fire onto the opposite wall of the cave. We take these shadows to be real, and we believe the voices of those passing us to be the voices of the shadows. Thus, we fail to see not only anything lit up by the sun, but the light itself, be it that of the fire or of the sun.[1]

The image is obviously about us. Plato alienates our human situation in order to surprise us. Most of the time, we live in a

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[1] Cf. R., Book 7, 514a-521a. The summary refers to 514a-515a.

false familiarity, not only with the world, but also with our-
selves. We may perhaps be surprised by some unusual human
situations. But we are not surprised by our common human sit-
uation, which does not appear to us as something striking. To
that extent, we are not our own closest neighbours, but our most
distant ones. The alienation due to this strange image of our
human situation disrupts the familiarity acquired by long habit,
and we find ourselves where we would never have thought we
could be – in a cave. And now we are struck. In order to be-
come conscious of the common nature of our human situation,
we need an uncommon one. In this context, I want to stress
three particular points.

a) We are the captives of images presented to us by enter-
tainers. The entertainers could have been the poets or the soph-
ists. Today we might say the opinion makers. Their opinions are
our reality.

b) Philosophy is the liberation from this captivity of the
mind or this captivity in opinions. As the cave is also an image
of the womb, we may further say that philosophy is the libera-
tion from the womb of our prejudices. Thus, philosophy is a
kind of second birth.

c) However, this liberation provokes a resistance within us.
We have an urge to stay put in the cave of our prejudices. We
are afraid of the pain of the second birth. Philosophy is not
harmless: Sometimes it hurts. It drags us out of the security of
our prejudices and takes us to where we no longer feel at home.
It is almost as if we were transported to another planet. But then
the earth – the cave – appears strange from the angle of the lib-
erated. Liberation grants us a stranger's view. It allows us to see
familiar things as if we were seeing them for the first time. In so
doing, it removes us from the accustomed human order. Thus,
philosophy is a kind of death, that is, the death of a human be-

ing caught up in prejudice. Philosophising also means learning to die,[2] to use a definition from Plato as a metaphor.

The light in which things are visible outside the cave is that of the sun. Just what the sun is meant to represent in Plato's image we shall not be able to tell by the end of our reflections. But what this introduction to philosophy may perhaps achieve is to let a ray of light penetrate into the darkness of our cave and for a brief moment set aglow in sunshine the twilight in which we normally live. That is something you may actually expect from philosophy. For the journey from darkness to light has been regarded as the decisive symbol of philosophy in almost all ages and cultures in which philosophy has existed. But what does this symbol mean to us?

## 2. Word and Concept

Let us start with the word "philosophy". It appears rather late in the history of humankind, that is, about two thousand five hundred years ago, in Greece. It is made up of two Greek words, *"philos"*, which means friend, familiar or lover, and *"sophia"*, which means wisdom. A philosopher, then, is one who is friendly to or familiar with wisdom. Plato interpreted "philos" as meaning that the philosopher is wisdom's friend in so far as he does not yet have wisdom, but strives after it. He makes Socrates say to the young Phaedrus in the dialogue of the same title: "To call somebody wise, Phaedrus, seems to me to be something great and only appropriate to God, but to be a friend of wisdom or something of the kind might be more fitting

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[2] Phd., 64a-68b. For a detailed interpretation of the cave image, see Ferber, 2nd ed., 1989, 115-148.

and more correct in tone."[3] Accordingly, philosophy is not a state, but a movement or activity. It strains to move away from something towards something else. It would like to move "from here to there".[4] It is a relationship like love. It is love of wisdom in a new sense of the word. Wisdom here means neither technical skill nor practical cleverness, but knowledge. For, unlike religion, philosophy does not want only to believe or to have faith, but to know. Philosophy is the human urge for knowledge driven to its extreme.

However, even Socrates, who did not presume to know much, recognised a difference between knowledge and true belief or opinion, which he regarded as the foundation of his search for knowledge: "I think I do not merely guess that true belief and knowledge are different things, but if I were to assert that I know anything at all – which I would not wish to do with regard to many things – I would count this one thing among those that I know."[5] The difference between knowledge and a true opinion is that knowledge can supply reasons. Knowledge is "true opinion with reason";[6] whereas true opinion without reason "falls outside knowledge".[7] For Socrates, philosophy is the *activity* of giving and taking reasons.[8]

In the course of the centuries, the word "philosophy" has undergone great changes of meaning. I will highlight only two of these.

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[3] Phdr. 278d. Transl. Ferber. An important discussion regarding the word "philosophy" is found in Walter Burkert, 1960, 159-177.

[4] Phdr. 250e. R. 529a. 619c. Tht.176a-b, basic formula frequently used by Plato.

[5] Men. 98b. Transl. Ferber.

[6] Tht. 201d. Transl. Ferber.

[7] Tht. 201d. Transl. Levett.

[8] Plato uses the word for the first time in this new sense in Ap. 28e.

Philosophy in the usual sense, as the word is mostly used today, means a way of thinking or conception. We speak, for example, of the philosophy of the management of an enterprise or the philosophy behind the politics of a country, such as the philosophy of reciprocal deterrence or disarmament. In what follows, I will not use the word in this sense.

In contrast, philosophy in its real sense means the *doctrine* of first reasons and causes. The definition dates back to Aristotle (384-322 BC).[9] Philosophy in this sense is the exploration of principles. For principles are in fact reasons. Philosophy is the doctrine of the fundamental reasons for that which is.

This has brought us to the subject matter of philosophy. It is the world and everything in it. This is how a medieval thinker put it: The "religion" peculiar to the philosopher is the study of that which is. Potentially, therefore, any object may become a topic of philosophy: a mouse no less than a man or nature, a picture such as van Gogh's *Sunflowers* the same as a computer. But the philosopher is also interested in concepts such as space and time. Anything knowable is the subject matter of philosophy.

An object becomes the subject matter of philosophy when it is considered from the angle of specific questions. A fundamental question is simply: "What is X?"[10] X can stand for any object. This question marks the transition from the active attitude to the contemplative or theoretical. Initially, we cleave to the active attitude to things and humans. We use things, whether they are made by nature or humans. We use a computer, but we do not ask: "What is a computer?" or "What is artificial intelligence?" We may want to have more space, but we do not ask:

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[9] Cf. Metaph. Book 1, Chapter 2, 982b9-10. Revised Oxford Transl.

[10] Cf. the title of Thomas Nagel's essay, 1974, 435-459.

"What is space?" We ask: "Is there any time left?", but not "What is time?" We may set traps for the mice in the cellar, but we do not ask: "What is it like to be a mouse?" Humans often use other humans as means to their ends, but they do not ask: "What is a human being?" – for example, in contrast to a mouse or to another animal or to a computer. Normally, we are so confounded by the world that we are unable to ask such questions. It is as if, for all our bustle, we are in a stupor or asleep and dreaming.

The philosopher, in contrast, is a man who disturbs our sleep. We begin to wake up when we begin to wonder about things or to be astonished by them. Thus, since Plato, the capacity for wonder has been regarded as the beginning of philosophy: "For this is an experience that is characteristic of a philosopher: this wondering. This is where philosophy begins and nowhere else. And the man who made Iris the child of Thaumas was perhaps no bad genealogist."[11] Iris is the rainbow, which still fills us with wonder today. The sea god Thaumas, Iris's father, is the "wonder". And Aristotle confirms: "For it is owing to their wonder that men both now begin and at first began to philosophise."[12]

But what makes the philosopher wonder is not the extraordinary but the ordinary. That is something that generally no longer astonishes people. Just as we no longer notice a sound we always hear, for example, the surf of the sea, so we take no notice of the ordinary because we have become accustomed to it. In the same vein, the fish will be the last to discover the water. But for the philosopher, the ordinary is the extraordinary, which he tries to explain. He needs no other miracle. Thus, he

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[11] Tht. 155d. Transl. Levett.
[12] Metaph., Book 1, Chapter 2, 982b12-13. Transl. Ross.

is, as it were, a "specialist" in what is no longer noticed because of its unspectacular ubiquity. He has to say what nobody else says. He has to speak where everybody else is silent. As the un-noticed is usually something quite general, the philosopher's expertise, in contrast to that of the specialist, concerns the general. Consequently, many of the most important philosophical questions are formed around general notions such as "what", "where from" and "what for". Basically, these are children's questions. Some of them have aroused the interest of philosophers to a special degree. Most frequent among them are "what" questions. They can be formulated in the following sentences of three or four words.

a) What is there? This is the fundamental question of the doctrine of what is, the doctrine of being or ontology. For the present, instead of "the doctrine of being", we could say "the doctrine of reality". Aristotle and many other philosophers right up to our own century have seen the question of what is as the fundamental question of philosophy. But as our understanding of the term "being" is inadequate, this question must first clarify the meaning of the word "being".

b) What do we know? This is the fundamental question of epistemology, given special emphasis by the French philosopher René Descartes (1596-1650). Descartes asks himself whether it is not the case that everything we believe we know is deception and therefore our life comparable to a dream. The purpose of this question is by no means to demonstrate that our life is really a dream. Rather, by way of radical doubt – that is, doubt reaching down to the roots – Descartes wants to arrive at what is certain beyond any doubt about our ability to recognise the world as it is. The question "What do we know?" then becomes "How can we know anything?"

c) What do we say? This is the fundamental question of the philosophy of language. It expands Descartes's doubts about

knowledge to language. Is language only a means to express our thoughts? Or can it also steer our thoughts in a wrong direction? If so, the philosopher's first task would be "to break the tyranny of the word over the human mind",[13] as Gottlob Frege (1848-1925) put it. Ludwig Wittgenstein (1889-1951) is one of the most important thinkers who came to regard knowing our language as the central topic of philosophy. For him, the question "What do we say?" turns into "What is the meaning of what we say, i.e. what is the meaning of a word?"

d) What is truth? This is the fundamental question of the doctrine of truth. As our understanding of the term "truth" is also inadequate, the doctrine of truth must begin by clarifying the meaning of the term "truth". Then it has to establish criteria for what we may consider to be true. As there are likely to be several criteria, the doctrine of truth must finally search for the main one.

e) What is good? This is the fundamental question of ethics. Ethics is the doctrine of what is good. As our understanding of the meaning of the term "good" is, again, inadequate, ethics in the first instance must look into the meaning of the term "good". But the good is something that should be done. Therefore, the question "What is good?" leads to the question "What should we do?"

To put it very simply, the philosophical questions asked in Antiquity and in the Middle Ages were primarily about being, those asked in modern times mainly about knowledge and those asked in the twentieth century particularly about language. Philosophical problems, too, have their youth, their prime and sometimes their old age, when they fade into the background.

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[13] Begriffsschrift, Preface, XII. Transl. Bauer-Mengelberg with an alteration by Ferber.

Ethical questions, like those about truth, have been asked in every epoch of the history of Western philosophy. Other questions are more peculiar to specific periods.

Naturally, these five "what" questions are not all the questions there are. At the start of an introduction, we cannot be conscious of all philosophical problems, let alone of their possible ranking order. Our awareness of problems must also ripen. Progress in philosophy, therefore, is also essentially progress in our awareness of the problems that surround us but are not sensed by us. Therefore, philosophical progress does not consist in the discovery of new empirical facts, nor in the creation of new technologies, be it for making bread or bombs.

Philosophy is not useful in this immediate sense, but neither does it do any harm. When I once asked "What is a philosophical question?", a student replied, with some justification: "A philosophical question is a question where the answer doesn't matter." But man does not live by bread alone, nor is he destroyed by bombs alone. False thinking, too, can contribute to destroying him and his surroundings. Philosophical progress is progress in thinking and consists in the elaboration and refinement of queries. In this process, we may realise that some questions are wrongly put and we may have to reject them as being nonsensical. But the reason we are able to ask such questions is not only that we live in the darkness of the cave, but that we can also become conscious of the darkness. Occasionally, we see light falling into the darkness. Then we, too, experience something of the liberation mentioned in the image of the cave. And then we may count ourselves among the race that tries to rise out of the darkness towards the light. That is the human race.

## 3.  Philosophy and Common Sense

An introduction to the key concepts of philosophy may give rise to a mistaken idea that "we are here – philosophy is there", as if we had been led into philosophy from outside. In reality, we are neither outside nor indeed above philosophy. We are *in* philosophy, even if we believe that we are outside it. We are introduced to it from within. For we already have a philosophy without which we would hardly be able to live, even though we are usually unaware of it. After all, we all have a sound intelligence.

A sound intelligence is also called common sense. According to Immanuel Kant (1724-1804), sound intelligence is nothing more than the average intelligence of a sound human being. Moreover, sometimes the intelligence or common sense of one is the stupidity or nonsense of another. As in the proverb, the "owl" of one is the "nightingale" of another.

Nevertheless, our common sense comprises a basic stock of convictions that nobody would be able to abandon without being declared mad. These include personal convictions such as "I am". But in addition to me, there are other people: my father, my mother, my siblings, my wife, my husband, my children, my colleagues and many more I do not even know. I live in a world. This world existed before my birth and will continue to exist after my death. In addition to the human beings I know and those I do not know, there are other creatures, animals and plants. Despite, and after, all the transformations, somehow I am still the same. Like all other living creatures, one day I will no longer be here.

Common sense is also a philosophical sense. But within this common sense, we all have our own world. It is illuminated by the light beam of personal opinions and interests. Whatever is in this beam is seen clearly. Whatever is outside it is hardly there.

Thus, as a rule, for us, most other people hardly exist. Our world, usually, is a small world. It is in fact only a part of the world, which is all our thought can comprehend, even if we sometimes take it for the whole.

There are philosophers who assert: "Whatever we are justified in assuming, when we are not doing philosophy, we are also justified in assuming when we *are* doing philosophy."[14] It is true that we have a basic stock of convictions from which we can hardly deviate, even in philosophy, without leaving the human community. A poet or composer also expresses feelings that anybody can have, for example, joy or sadness or even a joyful sadness. Likewise, the philosopher can express ideas that anybody may have, for instance, the idea of human ignorance or transience. On the other hand, the thesis of the incorrigibility of a sound human intelligence, or, as it is normally called, common sense, would probably detain us in the cave of our prejudices.

If common sense implies "community", it does not imply "immunity". It may even appropriate revolutionary insights. For example, once upon a time, common sense believed that the earth was flat, that the sun revolved round the earth, that about one fifth of all births were unavoidably accompanied by puerperal fever, etc. It still believes that the world can be known as it is. But this idea has proved doubtful.

Thus, we all already have a philosophy. We can philosophise only because the seed of philosophy is in us. But the philosophy of our common sense is not only undeveloped, but sometimes even wrong. However, what seems to me decisive in this context is that we cannot correct this philosophy from an extraphilosophical standpoint, but only from a philosophical

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[14] Chisholm, Person and Object, Chapter I, 16.

one. We cannot step out of philosophy to look at it from outside and to adopt a standpoint that would supply us with a yardstick for judging what is right and what is wrong about our everyday philosophy. Rather, common sense must create this yardstick – and essentially take the elements for self-correction – out of itself. This has been aptly put as follows: "We are like sailors who must rebuild their boat on the open sea, without ever being able to put into dock and reconstruct it from the best components."[15] Just as there is no standpoint outside language from which we can speak about language, there is no standpoint outside philosophy from which we can philosophise about philosophy. The practical consequence of the impossibility of a philosophical standpoint outside philosophy is the unavoidability of philosophising. Aristotle expresses this by the following dilemma: We have either to philosophise or not to philosophise. To prove that we do not have to philosophise, we have to philosophise. Therefore, we have to philosophise also when we deny that we have to philosophise.[16]

## 4. Philosophy, Science and Art

But has philosophy not been replaced long since by the sciences? At its origin among the Pre-Socratics, philosophy could not be separated from science, but today, one would think, the sciences have caught up with and indeed overtaken it. Now it only needs to deal with the residual problems of the sciences, until the residual problems, too, are completely taken over by

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[15] Neurath, 1932-1933, 206. Transl. Schick. The image has become famous as the motto of Quine, Word and Object, VII.

[16] The dilemma is handed down to us in several versions. Cf. Die Zeugnisse zu Aristoteles, Protreptikos, 1969, A3-A6, 21-22. Transl. Hutchinson and Johnson.

the sciences. This view can rightly point out that individual disciplines, such as physics, psychology, mathematics and others, have broken loose from philosophy, and that the process of differentiation into special disciplines continues. Philosophy, the daughter of Thaumas the "wonderful", has become the mother of many sciences. Thus, formal logic, for example, originally was part of philosophy. Today, in its mathematical shape, it has increasingly established itself as a discipline in its own right, which again breaks down into sub-disciplines.

However, the view that the sciences can replace philosophy may be countered as follows: New sciences also create new philosophical problems. Formal logic in its mathematical shape led to the philosophy of mathematical logic, informatics to problems of artificial intelligence and biotechnology to ethical problems, for example, whether we may morally do what we are technically able to do. Though the same questions are asked time and again, the range of philosophical problems does not remain the same. Scientific progress also creates new philosophical problems. To the extent that the new sciences address these self-created new problems, we may talk about the 'philosophication' of the sciences. Thus, philosophy has not moved out of many sciences, but has rather moved into them.

On the other hand, many of the individual sciences are unable to access many problems of philosophy. Thus, none of the individual sciences asks what it actually means *that something is*. Rather, they assume that something is, without explaining the meaning of this "is". Nor do they normally ask general questions such as "What is knowledge?", "What is language?", "What is truth?", "What is good?" The sciences claim to be roads to the truth, but they do not ask "What is truth?" On the other hand, where the sciences do ask such questions and try to answer them methodically, they begin to be philosophical. The limited range of the sciences, then, is another reason we cannot

say that philosophy has been replaced by the individual sciences. But without doubt, parts of philosophy have been taken over by the individual sciences. This process of the scientification of originally philosophical disciplines will continue.

But is philosophy a science in any case? Several philosophers have believed that philosophy is related not so much to science as to poetry. Accordingly, they expressed themselves in a metaphorical rather than a conceptual language. In this context, we may mention Plato with some of his dialogues, say the *Phaedrus*; St Augustine (354-430) with his *Confessions* (397); Friedrich Nietzsche (1844-1900) with *Thus Spoke Zarathustra* (1883-1885) and others. There is a sense in which they produced philosophy poetically. Today we can observe again that some philosophers are trying to speak like poets.

Conversely, we also find an increasing 'philosophication' of the arts today. This is how the French poet Saint-John Perse (1887-1975) put it in his Nobel Prize address of 1960: "Since even the philosophers are deserting the threshold of metaphysics, it is the poet's task to retrieve metaphysics; thus poetry, not philosophy, reveals itself as the true 'daughter of wonder', according to the words of that ancient philosopher to whom it was most suspect."[17] The ancient philosopher in question is Plato, who ushered the poets out of his ideal state. I would like to name two such philosophical works of art: first, Samuel Beckett's (1906-1990) *Waiting for Godot*. Two men, Vladimir and Estragon, are waiting for a Mr Godot, who is expected to come and does not come. Godot is an allusion to God or at least an important unknown person. *Waiting for Godot* can be regarded as a symbol of a life spent waiting for an event that does not take place. Another example is the film *Stranger Than Paradise*

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[17] Saint-John Perse, 1972, 444. Transl. Auden.

by Jim Jarmusch (born 1953). Two men are travelling aimlessly from New York through America, ending up in Florida, which may symbolise paradise. One of them falls in love with his cousin, whom he has met at the home of his Hungarian aunt and taken to Florida. When the cousin tries to leave for Budapest without warning, he decides on the spur of the moment to follow her. But she misses the plane and stays in Florida, while he catches it and flies to Budapest. It is not easy to put into words the philosophy shown, but not articulated, by the film. But it shows the meaninglessness, randomness and unpredictability of real life, which is even less familiar to us than the Paradise we dream of.

Nevertheless, the majority of philosophers have stressed the scientific character of philosophy. One of these is, again, Plato with his dialectic, even though it is never fully developed in his dialogues. He understood dialectic as a science, which, by means of an elaborate conversation, tries to find out what everything is. Other such philosophers are Aristotle with his *Metaphysics*, that is, the "theoretical science of first causes and principles";[18] Descartes with his *Principles of Philosophy*, which tries to anchor the unshakeable principle of philosophy in consciousness; and not least Kant (1724-1804) with his *Prolegomena to Any Future Metaphysics That Will Be Able to Present Itself as Science* (1783). In the twentieth century, it was above all Edmund Husserl (1859-1938) with his programmatic "Philosophy as Rigorous Science" (1911) and Rudolf Carnap (1891-1970) with *The Logical Structure of the World* (1928) who tried to develop a scientific philosophy and in so doing laid the foundations of philosophical trends that are still effective today. Scientific, for them, means logically compelling for anybody who

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[18] Cf. Metaph., Book 1, Chapter 2, 982b9-10. Revised Oxford Transl.

is able to follow the train of thought. All those who set out with the same basic assumptions are bound to arrive, by step-by-step deductions, at the same conclusions, so that there is no room left for personal opinions. It is no coincidence that Kant wrote his main work, *Critique of Pure Reason* (1781), under the motto "About ourselves we keep silent" and dispensed with an autobiography. For it is not the person, but only the work, that counts. It must be said, however, that this dream of a scientific philosophy, to which all human beings are committed, has never been fully realised.

Not only are the basic assumptions of almost all philosophers open to some kind of challenge and the basic terms in use generally ill-defined, but the conceptual analyses and derivations also usually leave much to be desired. The elimination of all personal opinion seems to be as impossible in philosophy as the elimination of all errors. It is true that even in the most exact natural sciences, in mathematical physics, for example, there is no absolute knowledge valid for all time to come. All the laws of physics that are valid today could prove to be false by tomorrow (cf. p. 68). But while in physics there is a degree of agreement about what laws are valid, the disagreement about the principles of philosophy that has existed ever since the Pre-Socratics will continue, albeit at a different conceptual level. The idea of converting this fundamental dissent in philosophy into a consensus by scientification will probably remain an illusion. For philosophy, that is, the human striving for knowledge, seems to contain a demand that successfully resists scientification.

On the other hand, drawing a clear-cut dividing line between science and art, as between subjective and objective, is hardly feasible. Rather, philosophy has proved to be so malleable that any attempt to define it too narrowly would be inappropriate. Just as philosophy itself has no sharp boundaries

separating it from "non-philosophy", there are also no sharp boundaries between philosophy, science and art. Even at the level of form, a certain diversity is a characteristic of philosophy. A purely scientific or a purely subjective philosophy has probably never existed, but different degrees of subjectivity and objectivity there are. The classical philosophers of the past and the present have spent their lives looking for objective truth, but were only able to express it in their subjective ways. Since they did this well and each in his own unmistakable style, most of the significant works of philosophy, from Plato's *The Republic* (about 365 BC) to Wittgenstein's *Philosophical Investigations* (1954), are also works of literature: Their form and content cannot be separated, but the literary form is part of the content.

Thus, the narrative frame of a dialogue by Plato can tell us various things about the content of the dialogue. A great philosophical work, as it were, leaves nothing to chance and, like a good dialogue by Plato, takes no step in vain. Great philosophy, therefore, does not preclude, but actually includes, the structured expression of a great human being: "The greater the man, the truer his philosophy",[19] says Oswald Spengler (1880-1936). "Truer" is probably used here in the figurative sense of more significant and richer. Conversely, the Platonist Alfred Edward Taylor (1869-1945) was not ashamed to confess his uncertainty: "But we can all make it our purpose that our philosophy, if we have one, shall be no mere affair of surface opinions, but the genuine expression of a whole personality. Because I can never feel that [David] Hume's [1711-1776] own philosophy was that, I have to own to a haunting uncertainty whether Hume was really a great philosopher, or only a 'very clever man'."[20]

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[19] Spengler, DW, Introduction, Section 15, 41. Transl. Atkinson.
[20] Taylor, Hume and the Miraculous, 365.

## 5. Philosophy as an Ideal

The terms "philosopher" and "philosophy" have not only a descriptive meaning, but also an evaluative one. Like knowing the objective truth, philosophy, too, is an ideal that has been approximated but never fully realised. The reason, in addition to all human inadequacy, is the difficulty of the questions asked by philosophy. We may be surprised that we can live without having solved at least those philosophical questions that affect us personally. Levin in Leo Tolstoy's (1828-1910) novel *Anna Karenina* was probably not alone in experiencing some painful moments because he found no answers to questions such as these: "Without knowing what I am and why I'm here, it is impossible for me to live. And I cannot know that, therefore I cannot live."[21]

Once we start solving philosophical questions, we feel sooner or later that we are not equal to solving them completely. But we must live and philosophise or at least try to do so, for the most important questions human beings can ask themselves are the philosophical questions. Moreover, the human mind has the ineradicable tendency to ask these questions. All men, Aristotle says, by nature desire to know.[22] All men, one might also say, by nature desire philosophy. For the human mind is philosophical by nature. Philosophy is the fulfilment of this striving for knowledge, which, however, most of the time only exists as a possibility and is often hampered and misled in its development.

"Music unfolds me", Goethe is supposed to have said. Philosophy does something similar. It unfolds our understanding of

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[21] Anna Karenina, Part 8, Chapter 9. Transl. Richard Prevear and Larissa Volokhonsky, Harmondsworth 2003.

[22] Metaph., Book 1, Chapter 2, 982b9-10. Revised Oxford Transl.

key concepts. But, to make things more difficult, this unfolding conflicts not only with external obstacles, but also with internal ones. These lie essentially in the "weakness of the arguments"[23] in which we "seek refuge" to consider "in them the truth of things".[24] The arguments give us not an immediate access to the "truth of things" but use our own cognitive instruments, such as name, definition, image and concept. Our cognitive instruments do not give us the essence we seek, but only "properties", "appearances" or "aspects" of the essence. They show it as it shows itself in their perspective. Therefore, as much as we seek what being, knowledge, language, truth or good 'really' are, as little do we find *what* they 'really' are. We find their essence only in the way that it shows itself in the perspective of our cognitive instruments.

The philosopher seems destined not to find what he seeks. His soul seeks the What or the essence.[25] This search is, as it were, implanted in a philosophical soul. Perhaps it is even in the interest of almost everybody. Thus, Plato makes Socrates ask: "Or don't you believe it to be for the common good, or for that of most humans that the real nature of each existing thing should become clear?"[26] Similarly, Aristotle writes: "And we believe that we know most about all things if, instead of their quality, size or location, we know what is man, or fire."[27] Even

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[23] Plato, Ep. VII 343a. Transl. Ferber.

[24] Plato, Phd.99e.Transl. Ferber.

[25] Cf. Plato, Ep. VII 343b-c and my interpretation, 2007, 65-66, 94-121. I am grateful to Hermann Steinthal, 1993, for his correction of an error in my interpretation of *mógis* (hardly), even though this does not eliminate the ignorance of the philosopher's incarnate soul, cf. Phd. 66e.

[26] Chrm. 166d. Transl. Sprague with small alteration by Ferber.

[27] Metaph., Book 7, Chapter 1, 1028a36-b1. Transl. Ross. Small alteration by Ferber.

if we deny that there is any essence, we implicitly assume an essence. Even if, like Wittgenstein, we do not accept an essence of language, but only a "family resemblance" between languages,[28] we still assume an essence of language. "Family resemblance" means the common features and differences between family members: Applied to languages, it means the common features despite the differences between languages. The assumption of (necessary) features common to languages is in fact the assumption of an essence of language.[29]

Of course, the cognitive instruments themselves present to the soul only what it does not seek, that is, not the essence, but only "properties", "appearances" or "aspects" of the essence, for example, "family resemblances". The philosopher trying to make headway in the struggle with a problem seems destined to be heading towards defeat. This had been put somewhat dramatically as follows: "He is always striding towards defeat and even before joining the battle he bears the wound in his temple."[30] The same experience, but with a more positive outcome, is conveyed by the German poet Rainer Maria Rilke (1875-1926) in a poem called "The Walk" (cf. p. 223): "So does, what we were unable to grasp, grasp us, full of appearance, [ ... ] and transform us, even if we fail to reach it."

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[28] Cf. in particular PI § 63-67. Transl. Anscombe.

[29] Cf. e.g. the detailed critique of Wittgenstein's conception of family likeness in PI, § 63-67, by Holenstein, Sprachliche Universalien, 169-210. No English translation.

[30] Ortega y Gasset, 1983, 434.

# II. Language

## 1. Speech as Action

Let us begin with language. At the point we have reached today, we can hardly begin directly with being or knowledge. Methodologically, it is more appropriate first to revisit the external device we use in philosophising about being or knowledge. Given that language is an indispensable device of philosophy, it is nevertheless difficult to describe it. Since we are almost always using language, it is close to us. When we talk about language, it is almost as if we were talking about ourselves. If it is difficult to talk about ourselves in the appropriate manner, it is just as difficult to talk about language in the appropriate manner.

An aphorism of Georg Christoph Lichtenberg (1742-1799) tells us: "Words are a kind of mathematics in letters for the natural signs of the concepts which consist in gestures and postures, the cases of nouns are the signs."[1] The natural signs of concepts, then, are not words, but gestures and postures. Words are only abbreviations for these natural signs. Language, in its origin, is not verbal language, but body language. Verbal language also uses parts of the body, the larynx and the mouth. To that extent, it, too, is body language. We do use our larynx and our mouth for speaking, as a result of the development of human beings from other forms of life, that is, as a result of evolution.

Evolution could equally have taken a different course. We could talk with our hands or feet or stomach, although this

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[1] Lichtenberg, Aphorismen, Sudelbücher, Booklet A, § 103. Not found in Hollingdale.

would make communicating complicated facts more difficult. But the fact that speech was originally a behaviour of the body, and verbal language, as it were, only an extension of our behaviour, has an important consequence. Like the movement of our body parts, for example, our hands and feet, the use of our speech organs is an action. Just as we perform body acts when we walk, run, wave, greet, so we perform verbal acts when we speak. Socrates was one of the earliest thinkers to say that "speaking is a kind of action".[2]

This becomes even clearer if we compare language with a game, say, the game of chess. Just as we perform actions when we move the chess pieces, so we also perform actions when we use words. Accordingly, Wittgenstein introduces the concept of linguistic action as follows: "For us language is a calculus; it is characterised by *linguistic activities*."[3] What he means by calculus becomes clear if we think again of a "kind of mathematics of letters" or a game of chess. In chess, we have various pieces, the king, the queen, the rook, etc. These are determined by the rules we follow in playing with them. Likewise, we have a diversity of words in language, which are determined by the rules we follow in using them. Language, then, can be described as calculus in so far as it is a system of linguistic terms and the rules governing the corresponding actions. Wittgenstein calls "the whole of language and all the activities with which it is interwoven the 'language game'."[4] But since language is rooted in speech, it has become customary to refer, not to linguistic activities, but to "speech acts". John Rogers Searle (born in 1932), for example, wrote a book entitled *Speech Acts* (1969). A

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[2] Plato, Crat., 387b. Transl. Ferber.

[3] Wittgenstein, PG, Part 1, Chapter 10, § 140, 193. Transl. Kenny.

[4] Wittgenstein, PI, § 7. Transl. Anscombe.

speech act is the production of a linguistic expression according to specific rules.[5]

Just as we perform body acts in different ways and for different purposes, so, too, speech acts can be of different kinds and serve different purposes. Wittgenstein, in his *Philosophical Investigations*, lists the following examples: "Giving orders, and obeying them – Describing the appearance of an object, or giving its measurements – Constructing an object from a description (a drawing) – Reporting an event – Speculating about an event – Forming and testing a hypothesis – Presenting the results of an experiment in tables and diagrams – Making up a story; and reading it – Play-acting – Singing catches – Guessing riddles – Making a joke; telling it – Solving a problem in practical arithmetic – Translating from one language into another – Asking, thanking, cursing, greeting, praying".[6]

## 2. Three Functions of Linguistic Action

Just as life evolves, time and again new speech functions, that is, new aims of speech, can develop, while others die. Here I would like to highlight only three that occur particularly often: the descriptive, the expressive and the directive.

By the descriptive function of language, we mean the construction of true or false sentences that convey true, false or merely probable information. We find this language function particularly in weather forecasts, stock exchange reports, reports about conditions on the roads, etc.

The expressive function is found in exclamations such as "Ouch", "Oh" or "Hey". But it is also prevalent in poems, as for

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[5] Searle, Speech Acts, Part 1, Chapter 1, Section 4, 16.2.
[6] Wittgenstein, PI, § 23. Transl. Anscombe.

instance in Gottfried Benn's (1886-1956) lines: "Roses, god-knowshow so beautiful, / the city in green skies / in the evening / in the transience of the years!" Here nobody will accuse the poet of false information because he calls the evening sky green. The question of truth or falsehood clearly comes second to the melancholy tinged by hope that overcomes the aging poet at the sight of roses. However, this expressive function is by no means restricted to expressing feelings. It can also arouse feelings, just as the crying of a child, a woman or a man can either express or evoke feelings.

Finally, the directive function: This occurs in commands such as "Look out!" or "Stop!" and in requests such as "Please rise!"

However, these three central language functions rarely appear in their pure form. Very often, poems also convey information, and scientific reports also contain exclamations and value judgments which seem to be phrased objectively, but which are not always objective: "They talk about the matter in hand, but they mean themselves" (Karl Kraus, 1874-1936). The directive language function appears equally rarely in isolation, except perhaps when used in the armed forces or in speaking to children and animals. As a rule, adults cannot simply be given orders. Nor is it enough to send out a cheque bearing the words "For the poor". It is necessary to give further information about the nature of the poverty and the purpose of the gift in order to show that the intention is not merely to exploit the donors' generosity, but also to spend the money sensibly. But even if there can be no doubt that the money will be used for a positive purpose, it is still necessary to awaken good feelings about that purpose. To arouse feelings, then, the expressive language function is also needed. This shows that the three different language functions are by no means separate. An effective communication uses all three functions jointly.

These three language functions seem to correspond to three different grammatical forms. The descriptive function occurs mainly in declarative sentences, the expressive in exclamative sentences and the directive in imperative sentences. It may therefore seem possible to infer the function directly from the grammatical form, but this is not the case. Just as the same smile can be ambiguous and suggest, for instance, affection, irony or *schadenfreude*, so the same speech act can serve a diversity of functions. The declarative sentence, "It was very nice", after a lecture can express the feeling that the lecture was very good. After an enjoyable evening, it can convey the host's invitation to the guests to come again, while – uttered in the right circumstances – it can be a phrase designed to make the guests take their leave. Many poems and prayers are dressed up in declarative sentences, but primarily express a feeling. When the psalmist writes: "Thou shalt tread upon the lion and adder; the young lion and the dragon shalt thou trample under feet",[7] he is probably trying to express a sense of security. An order can be clothed in the form of an interrogative or an optative sentence. Instead of "Bring me a coffee!", we may say "Could I have a coffee?" Politeness actually bids us do this. An exclamation such as "It's very nice here!" can have a directive function, for instance, to make a person stay in a given place. All this goes to show that the grammatical form often indicates the function, but that there is no necessary connection between the two.

There is no necessary connection even between content and function. When we talk about the weather, we are not, as a rule, trying to deliver a weather report. Rather, we want to start a conversation or we simply want to say something: "Whenever

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[7] Psalm, XCI 13. Transl. King James Bible.

people talk about the weather I always feel quite certain that they mean something else" (Oscar Wilde, 1854-1900). It is possible to say "yes" and to mean "no", or vice versa. In a letter, we sometimes have to read not only the lines, but also between the lines. When Socrates asks a question about a trifle, he means the most important thing by this trifle. When we speak ironically we mean just the contrary of what we say. It would sometimes seem as if humans have been given language in order to conceal their thoughts. The crux of the matter is that there is no mechanical method allowing us to infer the function of a sentence from its form (or its content). To do so, we must try to interpret the meaning of the individual acts of speech or writing, which can only be learnt through experience and reflection. This interpretation alone will tell us what the speech acts mean.[8]

## 3. Expression and Meaning

But how do we get from the mere form of an expression to the meaning? The meaning does not appear as something separate from the expression. When we hear a person utter a word or a sentence, we not only hear noises, but are also aware of content. When we read a book title or a headline, we not only make out letters, but also a topic. When we read the word "beware", we do not simply scan the letters b, e, w, etc., but we also hear a warning; and when we unexpectedly come across a placard bearing the notice "Beware of falling rocks", we may experience a small shock. When we are fretting over a delayed train and we suddenly catch a glimpse of a poster bearing the slogan "Let the train take the strain", we may start laughing. In all these cases, we not only see letters or hear sounds, but we also

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[8] I am indebted here to Copi, Introduction to Logic, Chapter 2, 68-71.

recognise content. By a word, we usually mean both the physical event – a bundle of sound waves or scribbles on paper – and the meaning. Likewise, by a sentence we usually mean both the physical event and the meaning.

In any case, that is how we perceive spoken and written language directly. What we perceive directly is also called appearance or phenomenon. "Phenomenon" comes from the Greek *phainómenon*, meaning "that which appears". But in phenomenology, that is, the doctrine of appearances, founded by Husserl and carried further by Martin Heidegger (1889-1976), it becomes a technical term for a specific method of considering objects. The decisive factor in this method is that it tries to dispense with all prior knowledge and to see objects as they present themselves in their own essence. Only does an object seen in this light become a phenomenon in the phenomenological sense, in which it is defined by Heidegger as "the entity's showing itself in its self sameness".[9] However, what shows itself through itself is often hidden by our preconceived notions. Therefore, we can call the revelation of what is given to our perception directly the phenomenological description.

The phenomenological description can be resolved into its elements. To resolve something is to analyse it. To analyse comes from the Greek *analýō*, which means "I resolve". When we analyse, or resolve, the phenomenological description into its elements, we have to distinguish between the expression or, rather, the form of expression, and the meaning. The expression is the single occurrence of a word, while the form of expression is the recurrent shape of this word. The expression "Attention" is the single occurrence of that linguistic sign, here and now. The form of expression of the linguistic sign "Attention", on the

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[9] Heidegger, BaT, Chapter 2, § 7, Section A, 31. Transl. Macquarrie and Robinson.

other hand, occurs time and again. We can read it on the road, in the train, at the airport and elsewhere. The expressions "attention", "Achtung" and "attenzione" in English, German and Italian differ in both usage and form, as do the sentences "Attention please", "Achtung bitte" and "Attenzione per favore". Nevertheless, we assume that the meaning is the same, at least in principle if not perhaps in all the nuances and connotations. Therefore, meaning and expression, or form of expression, cannot be the same. Expression, or form of expression, pertains to syntax, meaning to semantics.

Syntax comes from the Greek verb *syntáttō*, which means "I assemble" or "I arrange". In school grammar, syntax means the theory of sentences. In the philosophy of language, according to the terminology introduced by the American philosopher Charles William Morris (1901-1979), it means the theory of "combinations of signs without regard for their specific significations or their relation to the behavior in which they occur".[10]

Semantics comes from the Greek verb *semaínō*, "I give a sign" or "I mark". Semantics is the theory of what these expressions, or forms of expression, indicate. In fact, they indicate meanings. Therefore, again according to the terminology of C. W. Morris, semantics is the theory of the "meaning of signs in all modes of signifying".[11] It is the meanings of the signs that relate the expressions, or forms of expression, to the objects. That is why semantics, like syntax, is not merely the theory of the relations between expressions. Rather, it is also the theory of the relations between the expressions and the objects.

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[10] Morris, Signs, Language, and Behavior, Chapter 8, Section 1, 219.

[11] Morris, ibid.

## 4. What Is the Meaning of an Expression?

How do we get from syntax to semantics? Syntax alone cannot deliver semantics. It must be joined by something new that endows the syntax, that is, the physical constructs, with the added dimension of meaning. What is this new entity? It is not as tangible as the physical events and forms of events. Nevertheless, it exists, because otherwise the expressions, or forms of expressions, would have no meaning.

The obvious answer is that merely syntactical, or physical, events are transformed into linguistic events by ideas. Ideas are not physical, but psychological, more exactly, psychic events, that is, events in the soul or psyche. Expressions, therefore, obtain their meaning from psychic events. This thesis was already advocated by Aristotle (for "affections in the soul" read "idea"):

> Spoken words are the symbols of affections in the soul and written marks symbols of spoken sounds. And just as written marks are not the same for all men, neither are spoken sounds. But what these are in the first place signs of – affections of the soul – are the same for all; and what these affections are likenesses of – actual things – are also the same.[12]

Written words, then, are symbols of spoken ones. But while writing and speech differ from one person to another, the ideas are identical, and so are the objects of those ideas. This relationship can be visualised in a triangle, known as the "semiotic triangle"[13]:

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[12] Aristotle, De int., Chapter 1, 16a3-8. Transl. Ackrill.

[13] For the original version of the "semiotic triangle", see Ogden/Richards, Meaning of Meaning, Chapter 1, 11.

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                            Idea


         Spoken sign ....................... Object
         Written sign
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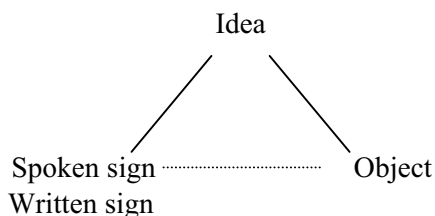
The written signs refer to the spoken signs, the spoken signs to the ideas, and the ideas to the objects. The decisive factor is that the words do not refer to the objects directly, but by way of the idea of the objects.[14] The word "house", for example, does not refer to the object known as a house directly, but only by way of the idea of a house.

Here an objection arises, which was first stated by Frege: "Ideas need an owner. Things of the outer world are on the contrary independent."[15] The owner of an idea is an individual who has an idea. How can ideas have different owners and yet be identical? I have my idea of a house and you have yours. I may be thinking of a tall house and you of Anne Hathaway's cottage. But we cannot compare our own ideas with the ideas of others directly. We cannot slip into the consciousness of other people and check whether their ideas are the same as ours – however much a poet may wish to render his thoughts just as he thinks them. Thus, Heinrich von Kleist (1777-1811) writes in his "Letter from one poet to another": "If I could delve into my breast, seize my thought and place it without any further ingredients

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[14] Cf. Ogden/Richards, ibid. "Between the symbol and the referent there is no relevant relation other than the indirect one, which consists in its being used by someone to stand for a referent."

[15] Frege, Gedanke, 351.Transl. Geach and Stoothoff, 334.

into yours: then, to tell the truth, the whole inner demand of my soul would be fulfilled."

But let us assume that we can slip into the consciousness of other people. What would then be the criterion that enables us to judge whether their ideas of a house are the same as ours? Each criterion could again only be an idea, which would need another criterion to ascertain whether it is still the same when I have slipped into the consciousness of other people, and so on to infinity.[16] Therefore, the meaning of an expression cannot be an idea. An idea is something subjective or private, but meaning is neither subjective nor private.

To counter the objection that ideas are subjective, Frege thought up the term "sense". He defines "sense" as the "mode of presentation" of an "object", "this word taken in the widest range".[17] Like the object, the sense does not differ from one person to another: It is not subjective, but objective. Therefore, words do not refer to objects directly by way of ideas, but by way of ideas *and* sense. This relationship can be illustrated by the semiotic triangle as follows:

Sense

Spoken sign ⸱⸱⸱⸱⸱⸱⸱⸱⸱⸱⸱⸱⸱⸱⸱⸱⸱⸱⸱ Object
Written sign
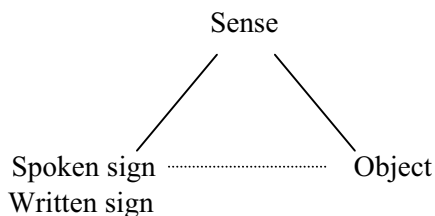
But here again, we can ask the question we have already put to our ideas. After all, to say that ideas are the same for all of us

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[16] Frege, Gedanke, 351-352. Transl. Geach and Stoothoff, 327.
[17] Frege, Sinn and Bedeutung, 144. Transl. Geach and Black, 153.

is a postulate that has not been proven so far and probably can-
not be proven at all (cf. p. 46). Likewise, it is only a postulate
that the "sense", or "mode of presentation", of an object at any
particular time is the same for all. It is a legitimate and quite
plausible postulate that basically we mean the same thing when
we say "house". Otherwise, we would never be able to come to
any agreement about the different houses. But what is the crite-
rion for the identity of the sense? It is supposed to be independ-
ent of the behaviour by which we demonstrate that we know
what a house is when, in response to the invitation, "Go into a
house", we go into a house. The construction of an identical
sense seems even more artificial than the assumption of ideas as
an explanation of communication through words. That is why
many philosophers find the identical sense obscure.

   According to Wittgenstein's *Philosophical Investigations*, it
is neither the idea nor the sense that provides an expression with
a meaning; rather, the meaning of the word "meaning", in many
of its occurrences, can be explained as follows: "The meaning
of a word is its use in the language."[18] It is the use that turns the
physical thing – the bundle of sound waves or the scribbles on
paper – into a language sign. This relationship can again be rep-
resented in the semiotic triangle as follows:

<br>

Use

Spoken sign ·································· Object
Written sign

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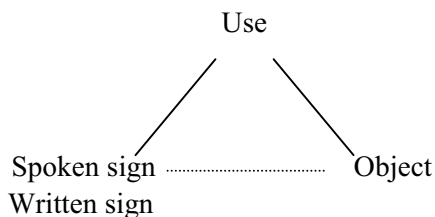
[18] Wittgenstein, PI, § 43. Transl. Anscombe.

This means that it is neither the idea nor the sense that endows an expression with meaning, but that it is use that relates the expression to the object. Use takes its bearings from our habits in using words. But when do we all follow the same habit in using a word?

## 5. Meaning and Rule

This question concerns a special case of following a rule. When we use an expression to describe an object, we do so in accordance with a rule. When, for example, we use the expression "house", we follow the rule that bids us use a physical form of expression – the spoken or written sign "house" – that corresponds to the object called house. Speaking means performing actions – in this instance, speech acts – according to specific rules. Speech is action guided by rules. Identity of meaning is a way of saying that we follow the same rule. But what does following the same rule mean?

The immediate answer is that we are dealing with a state of consciousness. But this would throw us back to the problem we have already mentioned – which is that states of consciousness are subjective and do not yield the common element that would allow us to follow the same rule. Moreover, a state of consciousness – like a memory – may deceive me about whether or not I follow the same rule. On its own, it does not provide a criterion for deciding whether I really follow the same rule or only believe that I am following it. Wittgenstein puts it like this: "And hence also 'obeying a rule' is a practice. And to *think* one is obeying a rule is not to obey a rule. Hence it is not possible to obey a rule 'privately': otherwise thinking one was obeying a

rule would be the same thing as obeying it."[19] A state of consciousness, then, does not guarantee that I am following the same rule. A state of consciousness is something within me, or an "inner process". But: "An 'inner process' stands in need of outward criteria."[20]

Another possible answer is that it is a disposition that makes us follow the same rule at any given time. A disposition is an inclination. But here two more objections arise. We are told how to use words by the rules of usage. In other words, the rules of usage are rules for actions and they are normative. In the English language community, I am expected to use the word "house", and not some invented word, when I refer to a house. I can, of course, call a house anything I like, for example, "louse". But if I want others to understand that my house is called "louse", but I do not actually live in or with a "louse", I must bow to the rules of the language community and revert to the use of "house". An inclination explains why one does something, but not why one should do something, that is, act according to the norms of one's language community. Further, I can apply the form of expression "house" to any number of houses. But an inclination at best explains why I am acting that way in a finite, limited number of cases, not why I act, and should act, that way in an unlimited, possibly infinite, number of cases. An inclination tells me as little as a state of consciousness does about why I should use the same form of expression to name the same things in, again, possibly an infinite number of cases. An inclination, like a state of consciousness, does not entitle me to apply the same form of expression to any number of new things,

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[19] Wittgenstein, PI, § 202. Transl. Anscombe.
[20] Wittgenstein, PI, § 580. Transl. Anscombe.

as the American philosopher Saul Aaron Kripke (born in 1940) explained in succession to Wittgenstein.[21]

This leaves only the possibility that it is the habits of a language community that cause me to use words according to certain rules. We follow the same rule when we succeed in understanding each other. Ultimately, this is trivial. Rather than solving the problem of how to account for all of us following the same rule, it only makes it disappear, as Wittgenstein believes. Therefore, it is not a psychological meaning, or sense, that determines the rule, but the rule that determines the psychological meaning and sense. It is not until I internalise the rule that a meaning emerges as an idea; it is not until I project it into the outside world that a sense emerges as a "mode of presentation".

We are of course free to use expressions very differently, for instance, to call a house a "louse". I can in fact invent a private language that I alone understand. But I would have to define that private language, not only when I revert to a public language, but also for myself, saying, for example, that "louse", for me, means "house". With such a language, I would also exclude myself from communicating with other people. I could, when greeting someone, lower my hand, instead of raising it, or stand on my head, but I would probably be declared a madman: That is how the existing customs of a language community cause me to perform linguistic actions according to the rules of that community. So we follow rules blindly, that is, without any justification by states of consciousness or inclinations. However, we are not wrong if we follow them as a result of social training. Our justification, or reason, for following the same rule, then, lies in the cause of that effect, that is, in the social

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[21] This point is developed in particular in Kripke, Wittgenstein on Rules, Chapter 2, 7-54.

training by a language community to which we have submitted since our childhood. So we copy the words and sentences of our parents and teachers. Our words are the words of others. We speak the language of the language community in which we grew up. We may also say that it is the *institutions* of the usage of a language community that cause us to follow the same rule on each occasion: "A game, a language, a rule is an institution."[22]

These institutions are embedded in the community's forms of life; they can change, albeit slowly. The social forms of life, in turn, are embedded in the biological form of life of the human species, especially the genetic endowments which enable us to speak not only with phonemes, but with words and sentences; this biological form of life can also change, albeit much more slowly, perhaps over millennia. But: "Only in the flux of life do words have their meaning."[23]

If a philosophy can be characterised by the astonishing things it accepts as ultimate ones, from Wittgenstein's perspective, they are the social facts of language usage.[24] They are the "primal or ur-phenomenon" that I have to accept because I cannot resolve it further. Thus, they resemble the "bed rock" by which "my spade is turned".[25] Here any doubt would become pointless, because such facts are the very conditions of doubt.

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[22] Wittgenstein, Remarks on the Foundation of Mathematics, VI, 32.

[23] Wittgenstein, LS, § 913. Cf. Ferber, Lebensform oder Lebensformen, 270-276.

[24] See Bernays, 1959: "Perhaps the different philosophical standpoints can be characterised by the astonishing things they accept as ultimate ones. In Wittgenstein's philosophy, these are sociological facts." 5. Transl. Reck with small modifications by Ferber.

[25] Cf. Wittgenstein, PI §217: "If I have exhausted the justifications I have reached bedrock, and my spade is turned. Then I am inclined to say: 'This is simply what I do'." Transl. Anscombe.

Whoever voices a doubt as to whether we actually operate with language habits has to operate with language habits.

That is why such accidental empirical facts are exempt from doubt in practice. They are fundamental in so far as our knowledge, to the extent that we can express it in language, is built on such facts. If we were asked why we follow language habits, we would be able to answer with Wittgenstein that that is just what we do: "We can only *describe* and say human life is like that."[26]

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[26] Wittgenstein, BFBG, 31; "describe" emphasised. Transl. Miles.

# III. Knowledge

## 1. Sensation and Argument

We acquire knowledge partly through sensory perception and partly through reflection. From time immemorial, sensation, sight in particular, has been regarded as the prototype of knowledge acquisition. We acquire knowledge by keeping our eyes open and absorbing the world through them. If we were to close our eyes or lose our sight, we would acquire less knowledge.

But what kind of knowledge do we acquire through our eyes? Do we see "mere sense data" – red spots, for example – in our field of vision? No. We perceive "sense data" as *something*, as we already realised when we were hearing voices and reading texts. If, for example, we see a red spot, we may be looking at a wine stain on a table cloth; if we hear a whistle in the mountains, it may be the whistle of a marmot; if we smell an odour, it may be that of a cigar; if we taste something sour, it may be lemon juice; if we feel a cold object in the dark, we may decide that it is a key. The same shape, for example, ⊠, can be seen as an envelope, a pitched roof from above, or a roof truss from below.

Looking at human beings, too, as a rule, we perceive not merely bodies, but men, women, children, bank clerks, workers, asylum seekers, "the motley crew of humanity" (Wilhelm Busch). The French novelist Marcel Proust (1871-1922) writes: "Even the simple act which we describe as 'seeing some one we know' is, to some extent, an intellectual process. We pack the physical outline of the creature we see with all the ideas we have already formed about him, and in the complete picture of him which we compose in our minds those ideas have certainly

the principal place.”[1] What a person sees depends both on what he is looking at and on "what his previous visual-conceptual experience has taught him to see".[2]

However, it is not only everyday perception, but also scientific perception, that sees something as something. As Thomas Samuel Kuhn (1922-1996) writes in *The Structure of Scientific Revolutions* (1962): "When Aristotle and Galileo looked at swinging stones, the first saw constrained fall, the second a pendulum."[3] It is not possible to build a theory on pure observation even in empirical science. Observation always involves a theory. Observation and theory, so to speak, merge into one. The more we know, the more we see something as something. The more flowers we know, the more we recognise the specificity of individual flowers, for example, the specificity of bluebells. It is not until we analyse these sensory impressions that we can try to distinguish "pure" sense data from their interpretation, even though there may be no sharp dividing line between data and interpretation. The sensation is mediated through the "lenses" of our interpretation. There is no such thing as unmediated sensory knowledge. Unmediated sensory knowledge, like a pure sense datum, is an abstraction.

In fact, sensory perception is a relationship between (a) a perception and (b) a sense datum perceived as (c) something. It is a tripartite relationship. The sense datum can be perceived from two different angles: on the one hand, in its physical or chemical aspect, on the other hand, as a phenomenal fact.

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[1] A la recherche du temps perdu, Volume 1, Du coté de chez Swann, Part 1, Combray. Transl. C. K. Scott-Moncrieff, Swann's Way, New York 1922.

[2] Kuhn, Structure, Chapter 10, 113.

[3] Kuhn, ibid. 121.

The sensory datum can therefore be analysed physically or chemically: Lightning, for example, is an electric discharge of short duration and high voltage. But however we analyse the datum, it must make an impact on our sensory organs if it is to be accessible to us at the phenomenal level. The electric discharge makes an impact on our retina. Our eye has a causal relationship with its surroundings and it is through that relationship that it experiences any changes to the retina. According to the causal theory of perception, the causal relationship is *necessary* if we are to have any knowledge involving sensory experience.

Some changes are forwarded to the nervous system and the brain as signals. They generate sensations, in the present instance, a sensation of light. This is then interpreted as something specific, say, as the perception of a flash of lightning. The same applies to hearing, smelling, tasting and touching. For example, we interpret certain sound waves as the solitary song of a blackbird before a thunderstorm. The creative contribution of consciousness is most recognisable in connection with ambiguous shapes such as ⊠ mentioned above.

Sensory knowledge contains a passive and an active part. The passive part is made up of what the body absorbs, the stimulus, and what the stimulus generates, the perception. The active part is what we make of the perception. The decisive factor, according to the causal theory of perception, is that our sensory knowledge is necessarily limited from the outset. We are unable to perceive things that do not affect our senses or exchange any physical energy with them. For example, we can imagine a thunderstorm with our inward eye, and Ludwig van Beethoven (1770-1828) can even make us apprehend one in the fourth movement of his Pastoral Symphony. Nevertheless, while listening to the Pastoral Symphony, we cannot see any

lightning with our actual eyes, because there is no visible lightning.

Of course, we can foresee or predict future thunderstorms. Although sensory perception is the prototype of knowledge acquisition, it is not the only form of it. Sensory perception would restrict us to the present and make us unable either to draw conclusions from the past or to arrive at inferences for the future. But even if we are given sensory perception together with the memory of other sensory impressions received, we are still unable to formulate a single scientific law. Moreover, there is knowledge – particularly mathematical and logical – that cannot be gained through sensory perception alone. Therefore, in addition to knowledge acquired through the senses – which depends on our interpretation, to boot – we must assume a further source of knowledge acquired, not through sensory perception, but through reflection.

Reflection makes use of reason. By reason, we mean non-sensory knowledge. It is knowledge gained not through our senses, but through the meaning of words. Reason, in contrast to sensory perception, draws conclusions. Granted, our perception of something as something is also based on conclusions: We see something as something because our past experience has taught us to see something as something. But sensory perception on its own does not draw any conclusions. It is reason that draws conclusions. Conclusions need not be expressly put into words. But if they are, it is done by means of arguments.

An argument in the technical sense consists of sentences that have a certain relationship with each other. This relationship is inferential. The sentences that contain the reasons for an inference are called the premises; the sentence that contains the inference is called the conclusion. Therefore, an argument consists of a premise, or some premises, and a conclusion. Two

types of argument are particularly important, the deductive and the inductive.

## 2. Deductive and Inductive Arguments

Let us consider these two types of argument by way of two elementary examples (the line between the premises and the conclusion stands for "therefore"):

<div align="center">

All humans are mortal.
All philosophers are human.

All philosophers are mortal.

</div>

The following applies to deductive arguments:

a) If all the premises are true, and the inference is drawn according to valid rules, it is necessary that the conclusion also will be true. The conclusion of a valid deductive argument, then, preserves the truth of the premises. In this example, the conclusion "All philosophers are mortal" preserves the truth of the premises "All humans are mortal" and "All philosophers are human".

However, we must make a distinction between the truth of the premises and the conclusion and the validity of the argument. Truth refers either to the premises or to the conclusion; validity refers to the argument that consists of both the premises and the conclusion.

A deductive argument is valid if the affirmation of the premises and the negation of the conclusion result in a logical contradiction between the premises and the conclusion. A logical contradiction is the conjunction of a proposition with the negation of that proposition. For example, a logical contradiction arises if we assert that all humans are mortal and all phi-

losophers are human but not all philosophers are mortal. If all humans are mortal and all philosophers are human, then all philosophers are also mortal. To say that philosophers are both mortal and not mortal – combining affirmation of the premises with negation of the conclusion – is a logical contradiction. Because the affirmation of the premises and the negation of the conclusion results in a contradiction, the argument is therefore valid.

The argument would also be valid if it came to light that not all humans are mortal, but some are immortal, or that not all philosophers are human, but some are non-human. For it would still be a logical contradiction to say that not all philosophers are mortal. Thus, the validity of a deductive argument rests only on the logical relationship between the premises and the conclusion, and not on the truth. Therefore, the following deductive argument is also valid, even though it sets out from an untrue premise and leads to an untrue conclusion:

<div align="center">

All humans are immortal.
All philosophers are human.
———————————————
All philosophers are immortal.

</div>

This argument is valid, although not sound. Only a deductive argument that is valid and has true premises is sound. A deductive argument is unsound if it is not valid or if one or more of its premises are false. So we can distinguish not only between truth and validity (cf. p. 61), but also between truth, validity and soundness.

Naturally, a valid and sound deductive argument need not have two premises. It can have only one. For example, the premise "It is not the case that some humans are not mortal" leads to the conclusion "All humans are mortal."

Only in a valid deductive argument does the conclusion necessarily preserve the truth of the premises. The same does not apply to the conclusion of an invalid deductive argument. In the following example, the conclusion does not preserve the truth of the deductive argument, which has nothing but true premises, but which is nevertheless invalid:

If a philosopher owns all the gold in the vaults of the Bank of England, he is rich
No philosopher owns all the gold in the vaults of the Bank of England.

No philosopher is rich.

A deductive argument, then, can have true premises and still be invalid. A deductive argument is invalid if the affirmation of the premises and the negation of the conclusion do not result in a logical contradiction between the premises and the conclusion. In the above example, there is no logical contradiction if the premises are affirmed and the conclusion negated. The negation of "No philosopher is rich" is "It is not the case that no philosopher is rich." What follows from this is: "Some philosophers are rich." There is no logical contradiction in asserting that although no philosopher owns all the gold in the vaults of the Bank of England, there are some rich philosophers. Some philosophers may be rich for other reasons. That is why the argument is invalid. A deductive argument, then, is either valid or invalid. There is no such thing as a halfway valid deductive argument.

b) The information content of the conclusion is already present, albeit undeveloped, in the premises. The conclusion only unfolds that knowledge. Valid deductive arguments, therefore, unfold existing knowledge. But this does not mean that our own knowledge is not expanded in the process. Thus, the conclusion of the argument

All humans are fallible.
All philosophers are human.

All philosophers are fallible.

contains an insight that some philosophers may not yet possess. We can also be taught something new by deductive conclusions. There is scope for deductive discoveries. It is by no means the case that we have already drawn all the conclusions from all the premises we know. Arthur Schopenhauer (1788-1860) cites the following example:

All diamonds are stones.
All diamonds are combustible.

Therefore some stones are combustible.[4]

This is a fact that we probably did not know before, even though the new knowledge was already present, hidden in the old.

Examples of deductive conclusions are found not only in formal logic, but also in arithmetic and geometry. The best-known example is probably the *Elements* of Euclid (about 325 BC). In this work, propositions are proven on the basis of principles and claims. These propositions are also called theorems, principles are also called axioms, and claims are also called postulates. Axioms and postulates are premises; theorems are conclusions. The method of proof consists in deducing theorems according to certain rules of inference. Euclid does not put these rules into words. But without doubt, by this method we,

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[4] Schopenhauer, W II, Book 1, Chapter 10, 118. Transl. Haldane and Kemp.

too, can learn something that we did not know before, at least not in a developed form. Take, for example, the proposition that "in any triangle the sum of any two angles is less than two right angles."[5] This could come as a new insight to most school children.

Frege, too, argues that arithmetical truths are obtained deductively, but can nevertheless increase our knowledge, which should "put an end to the widespread contempt for analytic judgments and to the legend of the sterility of pure logic". Thus, a schoolboy's knowledge will increase as much through the realisation that there are more prime numbers than he has ever been shown, or that "(a+b) × (a–b)" leads to "(a×a) – (b×b)", as it will through the awareness that some stones are combustible. To give another example, our knowledge is broadened by learning that there are some prime numbers with more than 258,716 digits, which used to be regarded as the largest prime number so far calculated.

Deductive conclusions must be distinguished from inductive ones. To show this, I will again choose an elementary example:

$$\frac{\text{All the philosophers observed up to day X have died.}}{\text{All philosophers are mortal.}}$$

This is an example of an inductive argument, to which the following applies:

a) If the premise (or premises) is true, it is not necessary that the conclusion is also true, as there is no valid rule that allows the truth of the premise (or premises) to be transferred to the conclusion. The premise "All the philosophers observed up to day X have died" refers either to a past day or the current

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[5] Elements, Book 1, Proposition 17. Transl. Joyce.

one. The conclusion "All philosophers are mortal" includes all future philosophers. However, a day in the future could see the birth of a philosopher who will not die. The conclusion is fallible, because its truth does not follow from that of the premise. An inductive argument, then, is not logically valid, since the affirmation of the premise(s) and the negation of the conclusion do not produce a logical contradiction between the premise(s) and the conclusion. The conclusion of an inductive argument does not preserve the truth of the premises, but expands their content.

Accordingly, the conclusion of a general inductive argument may be wrong, if it is refuted, or falsified, by experience. In fact, no conclusion of a general inductive argument can be true in a strict sense, because no conclusion of a general inductive argument can be proven, or verified, completely. To verify a general inductive argument completely, we would need to be in a position to cite all future examples, that is, a potentially infinite number of them. Not least, we would have to include all future philosophers. In order to do that, not only would we have to be immortal ourselves, but, as I have said, one day a philosopher would have to be born who would never die. The conclusion above is confirmed, without exception and therefore indisputably, only up to the present moment.

Other conclusions reached inductively, for example, that philosophers are hard to understand, are less well confirmed. However, the degree of confirmation is not determined by the meaning of the words – although this must be defined sharply enough – but by experience. An inductive argument is never either valid or not valid, but rather more valid or less valid. But even when it is more valid or less valid according to experience, it is not more or less logically valid but always logically invalid. A conclusion reached inductively can only be more or less well verified, or confirmed.

b) The information content of the conclusion is not found in the premises, as it is, in undeveloped form, in deductive arguments. Inductive conclusions do not disclose what we already know in a hidden form: They project existing knowledge into the future.

Examples of inductive arguments occur in most scientific disciplines. All the natural laws go beyond merely describing the condition of the world to date. Even a simple one, such as Hooke's "The pulling force of an elastic spring is proportional to its extension", projects existing knowledge into the future. That the extension is proportional to the pulling force is valid for all elastic springs, including those in epochs to come. Natural laws are not obtained by merely listing empirical data; generally, though not always, they are articulated on the basis of a working hypothesis. However, they are confirmed only by empirical data available up to the present and therefore fundamentally fallible. All the natural laws that are valid today may no longer be valid tomorrow. By tomorrow, the earth may no longer rotate round on its own axis, and by tomorrow, the sun may not rise again.

Inductive arguments – let me repeat it once more to avoid misunderstandings – are not logically valid. In inductive arguments, the affirmation of the premise(s) and the negation of the conclusion do not produce a logical contradiction.

Despite their logical invalidity, inductive arguments play a more important part in the empirical sciences and in everyday life than deductive ones. We use inductive arguments not only in many empirical sciences, medicine for example, but above all in our daily routine, as shown by the following reflections: Because so far the sun has always risen, it will also rise in future. Because so far fire has always burnt us, it will also burn us in future. Because bread has nourished us till now, it will also nourish us in future. Because the chair we sit on has not floated

off into the air by itself so far, it will not cease to obey the laws of gravity in future, etc.

All these conclusions are fallible, but without the instinctive subjective belief in their truth, we would not be able to perform the simplest, most mundane actions. That is why David Hume, in his *An Inquiry Concerning Human Understanding* (1748), described induction – or, to be more precise, custom (cf. p. 70) – as "the great guide of human life".[6] A belief in the "validity" of our inductive arguments is essential to our activity and survival in this world. Conversely, in a world without laws, no predictions or plans would be possible and our expectations would be constantly disappointed. Such a world would be like a nightmare in which we would not be able to take one step securely or eat one meal in peace. Conceivably, what was firm ground yesterday would dissolve under our feet today, the bread that has nourished us would poison us today, and the chair we are sitting on would lift off into the air. Even the most universal laws of nature, such as the principle of conservation, would become void. Our belief in the existence of natural laws would vanish. "There would be an end at once of all action, as well as of the chief part of speculation."[7] Nevertheless, the belief that the laws of yesterday and today will still be valid tomorrow is not, and cannot be, justified by a logically valid argument. Theoretically, tomorrow everything could be completely different.

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[6] Hume, Enquiry, Section 5, Part I, 44.

[7] Hume, ibid., 45.

## 3.  How Do We Justify the Conclusion of an Inductive Argument?

Let us assume that a creature capable of reason from a distant planet has come to our earth for a day. It sees that the sun rises, senses that fire burns, feels that bread nourishes, etc. Does it therefore infer that the same will happen in future? Hardly. But if it has spent a week on earth, it will expect the phenomena to repeat themselves. And if the phenomena repeat themselves over a year, or indeed over several years, it will probably conclude that the same phenomena will repeat themselves forever. There is no logical justification for this conclusion. Nevertheless, we all draw it instinctively. A baby already learns from experience: "As soon as he cried he was fed" (Wilhelm Busch).

Even animals harbour such inductive expectations, although they do not formulate them in a language, and it is doubtful that they are able to draw inductive conclusions at a pre-language level. Thus, a cat "expects" that the milk that nourished it in the past will also nourish it in the future. A chicken "expects" that the person who brought it food in the past will continue to feed it. However, as Bertrand Russell (1872-1970) remarks, it can end tragically for the chicken: "The man who has fed the chicken every day throughout its life at last wrings its neck instead, showing that more refined views as to the uniformity of nature would have been useful to the chicken."[8]

On what extra-logical ground do we extend the content of the experiences we have had to experiences we have not yet had? By what extra-logical right do we project our past empirical knowledge into the future? That is the so-called induction problem. David Hume did not discover it, but he was the first to

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[8] Russell, Problems, Chapter 6, 98.

recognise its full importance, even though he does not use the term "induction". He would say: Custom is the principle that enables the transition from what we know to what we do not yet know. In his view, custom plays the decisive part in both the evolution and the justification of these conclusions. Custom is why we make the transition, and why we are allowed to make it. This justification is also called the induction principle.

However, custom as a justification is contradicted by the certainty with which we draw these inductive conclusions. We do not know that tomorrow the sun will rise, fire will burn, bread will nourish again, etc., but our certainty seems justified by the fact that such inductive conclusions – despite the tragic error of Russell's chicken – are rarely refuted by nature. The chicken has had its neck wrung. But this was because it had developed somewhat undifferentiated ideas about the uniformity of nature rather than about the uniformity of human behaviour. The sun does not set and rise everywhere daily, for example, at the North or the South Pole. But this does not disprove the fact that in our part of the world, so far, it has set and risen every day. If these conclusions could be justified merely by custom, the confidence based apparently on nature would be incomprehensible. Why should nature follow our customs?

Hume's problem was presented in a new version by Nelson Goodman (1906-1998) in his *Fact, Fiction and Forecast* (1955). While Hume was concerned with justifying our customary inductive inferences, Goodman shows that we need further reasons for our preference of accustomed generalisations over unaccustomed ones. Let us assume that all the emeralds we have seen up to a certain point in time, *t*, are green. And let us call an artificial colour, which is green up to a certain point in time *t*, but red afterwards, "grue". Our experience up to *t* will support both inductive generalisations, that all emeralds are green and that they are "grue". As both general hypotheses are

equally well confirmed by our experience up to *t*, we can replace "green" with "grue" and, instead of "All emeralds are green", say "All emeralds are grue." But then we are equally entitled to the conclusion that after *t*, all emeralds are green and that after *t*, all emeralds are "grue". Given a certain quantity of data, and using such artificial predicates, we can find a large, indeed potentially infinite, number of inductive generalisations with equal rights. For now, I will select only one.

Why do we not usually draw conclusions that project such artificial predicates into the future, for instance, that all emeralds are "grue"? Goodman's answer is that conclusions that do not use artificial predicates such as "grue" are better embedded in our usage than conclusions that do. That is why we choose one kind rather than the other, and we feel entitled to say that emeralds will continue to be green in future. But this answer is at least as unsatisfactory as Hume's. Why should nature obey our existing linguistic customs?

An apparent way out is to attribute probability to our inductive conclusions, if not truth. According to our empirical observations up to now, it is not true, but very probable, that the same thing will occur again. Here we have to make a distinction between the probability of events and the probability of hypotheses. In the first case, we attribute probability to events, in the second, to hypotheses about events. As hypotheses are formulated in propositions, we can also speak of propositional probability.

In the first case, probability is interpreted as the relative frequency of events in a sequence of events. This is empirical. Thus, it is an empirical fact that lung cancer occurs more frequently among smokers than among non-smokers.

In the second case, probability is understood as a relationship between propositions that partly imply one another. This approach is logical. Therefore, this kind of propositional prob-

ability is also called logical probability, although "logical" should rightly be placed between quotation marks. According to this interpretation, the proposition that all emeralds are green partly gives rise to the proposition that they will also be green in future. The proposition that fire has always been known to burn partly suggests that it will also burn in future. The proposition that bread nourished the hungry in the past suggests that it will also nourish them in future, etc. If the propositions about past observations are so well confirmed that the general propositions logically follow from them, we have the extreme case of the probability of the general proposition being equal to one. If, however, the propositions about past observations are so badly confirmed that it is the negation of the general proposition that follows from them, we have the other extreme case of the probability of the general proposition being equal to zero. Between these two extremes, we have a continuum of cases to which the "inductive logic" developed by Carnap applies (1950).

This "inductive logic" is very different from deductive logic, whose arguments are either valid or invalid. It is a logic of probability, whose arguments are more or less valid and whose conclusions are more or less probable. To quantify the "more" or the "less", the probabilities are allocated numbers between one and zero. Thus, it may be found that the probability of bread nourishing, based on past empirical observations, amounts to 0.999999. Therefore, the past propositions would imply a general hypothesis that "bread nourishes" to a degree of 0.999999.

But, to justify such a probability inference, we would need a legitimate reason for drawing conclusions concerning future experiences from past ones. We would need an altered induction principle which would make conclusions concerning the future, drawn from past experiences, probable, albeit not logically valid. How can we justify this inductive probability prin-

ciple? Perhaps because it has been true in the past? This would throw us back to the question of why it should also be true in future. To answer that, we would need a probability principle of a higher order making it probable that the probability principles to date will also be probable in future, and so on to infinity.

But let us assume that we can measure the probability of a general hypothesis without such a probability principle. In that case, we might prefer the well-confirmed general hypothesis $H_1$ to the badly confirmed hypothesis $H_2$ if the probability of $H_1$ is greater than that of $H_2$. The probability of $H_1$ is greater than that of $H_2$ if the past propositions imply hypothesis $H_1$ to a higher degree than $H_2$. Both $H_1$ and $H_2$ are general hypotheses. General hypotheses, like laws of nature, apply, by definition, to an infinite number of future cases. Therefore, an infinite number of cases to which $H_1$ and $H_2$ could apply are as yet unconfirmed. But since all the cases confirmed in the past amount only to a finite number, both $H_1$ and $H_2$ would have the same degree of probability – that is, zero.

If we deduct a finite number of confirmed cases from an infinite number of unconfirmed ones, the difference between the finite numbers of confirmed cases will be the same, that is, zero. Infinity minus however small or however large a finite number still amounts to infinity. Thus, *"in an infinite universe* (it may be infinite with respect to the number of distinguishable things, or of spatio-temporal regions), *the probability of any (non-tautological) universal law will be zero."*[9] But our universe may continue to exist for an infinitely long time. What we have so far observed is only an infinitesimal part of the universe. Therefore, inductive logic does not supply a good reason to character-

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[9] Popper, LSD, New Appendix, Section 7, 313. Italics in the original. Transl. Popper et al.

ise the well-confirmed general hypothesis $H_1$ as more probable than the badly confirmed $H_2$.

Nevertheless, we might subjectively regard hypothesis $H_1$ as more probable than $H_2$. We might underline this subjective probability by being prepared to bet on $H_1$ rather than $H_2$. Of course, we are only prepared to bet on single events, and not on any general hypotheses with an infinite number of unconfirmed cases. Only events can be dated; general hypotheses cannot. A "rational gambler" would take the objective chances into account in order to win his bet. However, faced with an infinity of unconfirmed events, nobody who makes a bet can win it. Thus, even in the case of rational gamblers prepared to bet, the interpretation of subjective probability fails to supply a logical reason for regarding the general hypothesis $H_1$ as more probable than $H_2$.[10]

That is why Karl Popper (1902-1994), in *The Logic of Scientific Discovery* (1959; original version *Logik der Forschung*, 1934), chose a different route. He argues that empirical laws are neither completely verifiable nor probable. At the same time, they can be refuted, or falsified, by a single counter-example. For instance, the proposition "All ravens are black" can be refuted by the existence of a single white raven, unless we believe that blackness is an essential characteristic of a raven and therefore do not call a white raven a raven in the first place. But the white raven I once saw in the Negev Desert was called a raven. If, then, empirical laws are neither completely verifiable nor probable, we may still adhere to them, so long as they are not falsified by a contradictory experience. Now, our usual empirical laws – for example, that the sun rises, fire burns and bread

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[10] For further information, see Popper, LSD, New Appendix, Section 9, Communication 3, 359-373, Subsection 11, 368. Transl. Popper et al.

nourishes – are not falsified as a rule. As they have not been falsified, they have been corroborated. An empirical law or a system of empirical laws, that is, a theory, is deemed to have been corroborated if it has been proved true by experience. Since the empirical laws mentioned have stood the test of time, we can obey them.

What is right about this reflection is that empirical laws are not completely verifiable, but can be falsified by a single counter-example, even if any counter-example is hypothetical. The above-mentioned white raven could have been an albino or fallen into a bag of flour or been painted white a short while earlier. We must therefore make a distinction between falsifiability as a logical possibility and falsifiability as an actual decision, and indicate precisely what would constitute a counter-instance. The empirical law "All ravens are black" is falsified by the existence of a white raven only if we actually define the bird in question as both a raven and white.

But Popper denies empirical laws any validity by his clear admission that Hume has posed a problem that cannot be solved by deductive logic. Popper did not find a positive solution to Hume's problem either, but he isolated a part of the original problem and proposed a negative solution for it: The conclusions of inductive arguments are not completely verifiable, but they can be falsified by a single counter-example. But Popper's negative answer does not solve the original problem – "What is our extra-logical justification for projecting our past knowledge into the future?" – by supplying a logical reason. There is no logical reason to project our past knowledge into the future just because it has been corroborated. Indeed, Hume's problem cannot be solved by logical deduction. Inductive conclusions do not acquire any validity through definition, as do deductive ones.

Popper's positive answer – that unfalsified conclusions have been corroborated – turns the original problem of what extra-logical justification we may have for projecting our past knowledge into the future into a test by time. But why should any empirical laws that have been corroborated till now also be corroborated in the future? That is exactly what we do not know, and shall never know. Therefore, I believe that Hume, in spite of Popper's attempt, is right in principle when he says: "It is not reasoning which engages us to suppose the past resembling the future."[11]

## 4. The Induction Principle as a Hypothetical Postulate of Practical Reason

With the concept of corroboration, Popper brings a new point of view into play – cognitive valuation. If a law of nature has been corroborated, it is *worth* accepting. But in the process, he moves in principle from the ambit of theoretical reason to that of practical reason, whereas Hume, in the passage quoted above,[12] has theoretical reason in mind. Let us pursue this point of view further. We want to accept Popper's critique and grant the laws of nature neither truth nor probability. Nevertheless, we can allow them a kind of extra-logical justification, that is, a justification not by theoretical but by practical reason.

So far, we have considered only theoretical reason. However, there is also a practical reason, since we obviously draw

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[11] I owe this hypothesis to Feyerabend, Probleme des Empirismus, Chapter 14, 362. English version by Feyerabend.

[12] Practical reason, in Hume's view, is only an imprecise and unphilosophical figure of speech for something that does not exist in reality. With this, he departs from both common and philosophical usage. Cf. Treatise, Book 2, Section 3, 413-416.

not only theoretical conclusions but also practical ones. Theoretical reason infers what will be from what was or what is; practical reason, on the other hand, infers what one ought to do. The empirical laws that have been corroborated express the knowledge acquired by humanity to date. This knowledge has clearly proved to be an advantage in the struggle for survival. Conversely, it would be a great disadvantage not to know what we know from experience, even though not everyone would have wished to put it in the words of Willard Van Orman Quine (1908-2000): "Creatures inveterately wrong in their inductions have a pathetic but praiseworthy tendency to die before reproducing their kind."[13]

The survival value of the past experience of humankind is my starting point. From those past experiences that have been *corroborated*, we can deduce directions for our actions which should also be valid in the future. Because the past experience that fire burns has stood the test of time, it is expedient to assume that it will continue to do so, and we would be well advised not to put our hands in the flames, if it can be avoided. Because bread nourished us in the past, it is expedient to assume that it will also nourish us in the future, etc. Therefore, instead of understanding the induction principle as a principle that tells us what is, I understand it as a norm that tells us what to assume and what to do on the basis of the assumptions that have been corroborated. The justification of this norm is not that I attribute any truth or probability to it, but that I see an advantage in following it. If, then, an inductive conclusion is not logi-

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[13] Quine, Ontological Relativity, Chapter 5, Natural Kinds, 126. For such a pragmatic justification of induction, see Reichenbach, Probability, 469-482, and Salmon, 1991, 99-122. I reserve this justification for hypotheses that have been corroborated.

cally valid, it is, as a rule, advantageous. A ban on induction would amount to an invitation to suicide. It is, for example, expedient, or indeed imperative, to assume that for some time to come, fire will continue to burn, bread to nourish, etc. If we assumed that fire no longer burns, or bread no longer nourishes, we would burn ourselves or starve to death, as the case may be.

Of course, the survival value of our inductive generalisations need not be as obvious as that. But if we were to assume, for example, that in future ravens will be white and emeralds "grue", that stones will fly up in the air instead of falling down, that the planets will no longer revolve in ellipses, etc., we would be able to continue living, but sooner or later we would find ourselves at a disadvantage in comparison to those who draw the more "valid", that is, more expedient, conclusions. Since the empirical laws cohere among themselves, we cannot abandon some without abandoning others. That is why usually not one empirical law has been corroborated, but a whole system of them. The pillars of the system, again, are some basic laws, such as the principle of conservation. It is expedient to assume that such a system that has been corroborated will be preserved in future, even if not every single law is important for our survival.

To that extent, an inductive conclusion – embedded in such a system – is not logically valid, but neither is it irrational. The alternative of assuming no inductive principle would surely be more irrational. Likewise, with our survival in mind, it would be more irrational to assume a principle whereby the opposite of our past experiences will occur. However, we are not dealing here with a valid conclusion of theoretical reason, but with a postulate of practical reason. This postulate is justified by the fact that, as a rule, it is expedient for our survival in a wide sense, even though once in a while it may not be so in exceptional cases.

Thus, Popper reports an episode of ergot poisoning in a French village.[14] Here the assumption that bread, or corn, nourishes was not borne out. But this experience does not force us to doubt the general law that has otherwise been well corroborated. The ergot poisoning is an example of how a general hypothesis has been falsified as a logical possibility, but is upheld, nevertheless, because we do not posit the counter-example as a criterion of the falsification of the whole law. After all, it could transpire that the cause of the disaster was not the ergot but the poisoned soil. Despite this mishap, it is more expedient to assume that bread nourishes than that it poisons.

Inductive validity, therefore, is not a question of either/or, but a matter of degree, since there are also degrees of expediency. Thus, it will be more expedient in the near future to prefer an empirical law that has been well corroborated – say, "The pulling force of an elastic spring is proportional to its extension" (Hooke) – to one that has been corroborated less well. These degrees of expediency could be quantified, in analogy to the degrees of inductive probability, as degrees of rational eligibility. If the past propositions have been corroborated so well that the corresponding law logically follows from them, we have the extreme case of the degree of rational eligibility being equal to one. If, on the other hand, the past propositions have been corroborated so badly that what logically follows from them is the negation of a corresponding law, we have the other extreme of the degree of rational eligibility being equal to zero.

Between these two extremes, we would again have a continuum of cases subject to the logic of preference.[15] This is nei-

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[14] Popper, Objective Knowledge, Chapter I, Section 6.

[15] For such logic, cf. Henrik von Wright, Logic of Preference, esp. §1-8, 7-20. It does not seem to have been applied to the problem of induction. Cf., e.g.

ther a deductive logic, whose arguments are either logically valid or invalid, nor an inductive logic, whose arguments are more or less (theoretically) valid and whose conclusions are quantifiably more or less probable. It would be a purposive logic, whose arguments are more or less (practically) valid and whose conclusions are more or less expedient in the sense of maximising more or less the expected utility. To quantify that "more" or that "less", we could allocate to the degrees of rational eligibility numbers between zero and one, but only for the finite range. That way, we would be able to establish, for example, that in a finite future, the degree of rational eligibility of the empirical law whereby bread nourishes will be equal to 0.999999, that is, nearly one.

Therefore, while the induction principle is not a principle of theoretical reason, it is, in my view, a natural and legitimate postulate of practical reason. For conclusions that have been corroborated well or even as completely consistent, it only makes explicit what we tacitly or implicitly expect, that is, that the future will be uniform with the present. In that sense, the induction principle, too, is an *institution* we tacitly accept.

An institution is a systematic framework which normatively stabilises our actions, for the future, as it has done before. The induction principle, understood normatively, seems to be our justification for projecting our past knowledge into the future. It arises from an urge that is too strong to be suppressed without running the risk of endangering our own survival and that of the human species. In this sense, the institution of induction really plays the part of the "great guide of human life" (Hume). Like a

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Popper's disciple Watkins, Science and Scepticism, Epilogue. For the present state of the problem, cf. John Vickers, "The Problem of Induction", *The Stanford Encyclopedia of Philosophy* (Fall 2014 edition).

guide, it tells us what to do. Like a guide, it issues to human beings the order: "If you want to survive and stay healthy, you should assume that, given laws that have been corroborated, the future is uniform with the past." Such an order is a conditional or hypothetical imperative. It remains one, even if the order is misleadingly clothed in the form of an absolute or categorical proposition describing the future.

Of course, here, too, it could be asked: Why should nature obey our demand for uniformity? The answer would be: because this demand itself is "natural" in so far as it was always obeyed by the empirical laws of nature that have been corroborated. But just because nature obeyed this demand in the past, why should it also do so in future? To this question there is no theoretical answer, and there will never be one, because we cannot foresee the future of nature with any certainty – and because things can turn out differently from our expectations.

Therefore, Popper is right in principle in saying: "I do not know – I only guess",[16] even though he is deviating from everyday usage, which allows us sometimes to talk about knowing when we are merely guessing. But it is equally right that knowing, here, lays no claim whatsoever to theoretical infallibility. We do not need any theoretical infallibility. John Stuart Mill (1806-1873) aptly stated this: "There is no such thing as absolute certainty, but there is assurance sufficient for the purposes of human life. We may, and must, assume our opinion to be true for the guidance of our own conduct."[17]

Certainty and assurance are different things, even though this distinction is hardly ever made in everyday life. Certainty is something psychological, assurance something practical. We do

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[16] Popper, Conjectures, Chapter XI, 317.
[17] Mill, Liberty, Chapter 2, 81.

not know whether fire will still burn tomorrow, but we make sure that it will not burn us tomorrow. For the purposes of human life, we usually do not need more than this practical assurance based on a rational – that is, here, expedient – choice. This practical assurance is probably the foundation of our certainty – our belief – that our past inductive conclusions will continue to be valid in future. In a theoretical respect, however, all inductive conclusions retain an irreducible remnant of irrationality. Theoretically, tomorrow everything could in fact be different. But it is not merely a custom, but also a command of practical reason, to assume that this will not be the case. In this sense, induction is really "the great guide of human life".

## 5.  When Are Axioms True?

But even valid deductive arguments need not always lead to true conclusions (cf. p. 62). A conclusion must be true only if all the premises of a deductive argument are true and the argument valid. But when are the premises of a deductive argument true? The premises of a deductive argument are considered undoubtedly true only if they are first premises. First premises are also called axioms. Their truth seems to be timeless and ubiquitous, "without, however, being provable by a chain of logical inferences" (Frege).[18] But what is the criterion of the truth of an axiom? A criterion is a necessary and sufficient condition of something, comparable to a litmus test.

Let us take the ninth axiom of Euclid's *Elements* as an example: "The whole is greater than the part." People think – as scientists and philosophers have done for 2,000 years – that it is the *evidence* that makes this proposition true. The word "evi-

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[18] Frege, Foundations of Geometry, 262. Transl. Kluge, 273.

dent" literally means "plain to see". What "catches the eye", what is clear and obvious, is evident. As little as I doubt that it is bright outside when the sun shines in a cloudless sky, as little do I doubt that the whole is greater than the part. Both notions make immediate sense, one to my eyes, the other to my reason. Trying to prove something that is evident – to vary a saying attributed to Aristotle – is like trying to prove with a candle that it is bright when the sun shines.

The axioms in Euclid's *Elements*, as he formulates them, refer only to finite figures. But how about infinite figures? With infinite figures, is the whole still greater than the part? If the part has an infinite number of elements, how can the whole be even greater than the part? In fact, if we follow the definition of infinite sets provided by Georg Cantor (1845-1918) in *Contributions to the Founding of the Theory of Transfinite Numbers* (1915), we find that the axiom in question is valid in one sense and not valid in another: "Every transfinite set T has subsets $T_1$ which are equivalent to it."[19] A transfinite set is an infinite set. Cantor's definition, then, asserts at one and the same time that the whole of the set is greater than its parts, and that it is not. A glance at the following illustration will explain the apparent contradiction. Remember that the line is supposed to consist of an infinite number of points:

●————————————●————————————————————●
A                              C                                              B
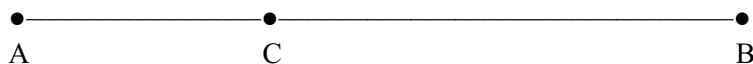
So, on the one hand, the whole of the line from A to B is longer than the part from A to C. On the other hand, the quantity of the points in the partial line AC is equal to that in the whole line AB, since both are infinite. Therefore, in Cantor's

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[19] Cantor, Contributions, Part III, Chapter 9, §6, 295. Transl. Jourdain. Part III missing.

terminology, the whole and the part are "equipollent", or to use a more familiar term, "equivalent". However, it may not be immediately recognised how a partial set can be equal in its extent to the complete set. I must therefore establish that fact by means of a definition.

The definition of parallelism was also assumed to supply a true proposition, which was called the parallel axiom. Euclid defines parallel as follows: "Parallel straight lines are straight lines which, being in the same plane and being produced indefinitely in both directions, do not meet one another in either direction."[20] This definition was used by others to formulate the parallel axiom, which is not found in explicit form among the nine axioms of Euclid.[21] According to the parallel axiom, for every plane in which there is a straight line G and a point P that does not lie on G, there is one straight line G' that goes through this point P and that is parallel to the straight line G.

This seemed so plausible that, to my knowledge, nobody seriously doubted its truth before the 19th century. The argument was about whether it was a first geometrical premise (that is, a geometrical axiom) or only a conclusion (that is, a theorem). There were many attempts to prove the parallel axiom, that is, to derive it from the other axioms of Euclid's system of axioms. But these attempts were all circular and therefore faulty. A

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[20] Elements, Book 1, Definition 23. Transl. Joyce.

[21] Instead, Euclid uses the 5th postulate to prove the axiom that we know today as a parallel axiom: "If a straight line falling on two straight lines makes the interior angles on the same side less than two right angles, the two straight lines, if produced indefinitely, meet on that side on which are the angles less than the two right angles" (Elements, Book 1, Postulate 5, Transl. Joyce). For an intelligible presentation of the problem, see Bonola, Non-Euclidean Geometry, 1-8. Transl. Carslaw.

proof is circular if the truth of the conclusion is already assumed in the truth of the premises.

In 1816, however, the mathematician Carl Friedrich Gauss (1777-1855) proved that the parallel axiom could not be derived from the other axioms. This raised the question of whether it was possible to do without it. Gauss answered this question in the affirmative, and he constructed a consistent geometry without a parallel axiom, which, however, he did not dare to publish. Later (in 1832) János Bolyai (1802-1860) and Nikolai Ivanovich Lobachevsky (1792-1856) also proved that the parallel axiom cannot be derived from the other axioms. They therefore felt justified – independently of Gauss and of each other – in constructing geometries in which the parallel axiom was no longer included. A little later still (in 1854), Bernhard Riemann (1826-1866) constructed a geometry with more than one parallel through a point P. In fact, it was found that there were infinitely many parallel lines.

In the geometry of Euclid, then, we have one straight line G' that goes through the point P and is parallel to the straight line G; in the geometries of Bolyai and Lobachevsky, we have no straight line G'; and in the geometry of Riemann, we have more than one straight line G'. All this is no longer immediately plausible or evident.[22] In other words, mere evidence can give a valuable hint about the truth of axioms such as the ninth or the parallel, but we cannot always rely on evidence alone where axioms are concerned. Evidence serves only at first sight as a criterion of the truth of axioms. A criterion at first sight is a prima facie criterion. And a prima facie criterion can be invalidated by more accurate reflection.

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[22] For an intelligible presentation of these non-Euclidean geometries, see Bonola, Non-Euclidean Geometry, esp. 57-85. Transl. Carslaw.

Therefore, David Hilbert (1862-1943), in *Grundlagen der Geometrie* (1899; *The Foundations of Geometry*, 1902), actually went so far as to abandon evidence as a criterion of truth. Instead of the fundamental concepts of Euclid's geometry, such as point, straight line and plane, he uses corresponding variables, "x", "y" and "z", which are not explained in terms of their content, but which can in principle be interpreted at will. Geometrical axioms, then, no longer need to be evident, but are conventions arbitrarily fixed between these variables. They are merely syntactical characters without any content. However, they must be consistent and independent of each other. From an inconsistent system of axioms, one would be able to derive anything one wished.

According to a law of logic – if (p and not p) then q – any conclusion q may follow from a logical contradiction. The small letters p and q are propositional variables standing for any concrete proposition. For example, we could substitute: If the parallel axiom is true (p) and not true (not p), then Hilbert is an unhappy man (q). But Hilbert did not want to prove this proposition in *Foundations of Geometry*. Axioms that depend on each other would be derivable from each other and would no longer be axioms.

Hilbert separates the logical and formal element from the concrete, and declares consistency to be the criterion of truth and (logical) existence. Thus, he writes to Frege: "If the arbitrarily given axioms do not contradict one another with all their consequences, then they are true and the things defined by them exist. This for me is the criterion of truth and existence."[23] Only in a second step does he assign a semantic to the basic terms and axioms, for example, the meaning of "point", "straight line"

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[23] Frege, Letters, 411. Transl. Geach and Black.

or "plane", or the meaning of the Euclidean axioms, albeit without the parallel axiom.

The dismissal of evidence as a criterion of truth has an important consequence. With evidence in use, it still seemed possible to claim that an axiom was evident in the sense of being true "in itself". Now it is no longer possible to maintain that an axiom is true "in itself", but only that it is true within the language community that accepts this particular axiom. Likewise, a proposition is true only within the language of the system of axioms concerned. Thus, the universal validity of the truth of axioms is restricted to the language community, for example, of the mathematicians who share these definitions and the semantics accompanying them.

But we may go somewhat further. Axioms need not be arbitrary constructs. As soon as we allocate a semantic to these syntactical signs, and it is accepted by a language community, the constructs in question come to represent the semantic rules of that language community. And as soon as these rules have stabilised, they become the semantic *institutions* of the language community. Therefore, in my view, the criterion of the truth of axioms need be neither mere evidence nor a consistent definition; it may also be the social fact of their stabilised semantic acceptance.

Such a language community can be very small, as it is, for example, in the case of the non-Euclidean geometries. Here it comprises those mathematicians who construct and teach such geometries. It can be larger, as it is, for example, in the case of Euclidean geometry. Here it consists of all those who accept the axioms of Euclid, including the parallel axiom. It can be even larger, as in the case of the first Euclidean axiom: "Things which equal the same thing also equal one another." This axiom is also called the axiom of the transitivity of equality: If a equals b, and c equals b, then a also equals c. It is a view shared by

most people, except perhaps by lunatics and philosophers – and denied by the latter only when they are philosophising.

The same applies to the metalogical axioms of identity and of non-contradiction. The axiom of identity can be expressed thus: Everything is what it is. According to this axiom, "no entity" is "without identity".[24] The axiom of non-contradiction can be stated as follows: No thing is at the same time and in the same respect another thing. We can combine both axioms and say, with Joseph Butler (1692-1752): "Every thing is what it is, and not [at the same time and in the same respect] another thing."[25]

This is the ontological formulation of the axioms of identity and of non-contradiction. The ontological formulation of the latter axiom goes back to Aristotle: "… the same attribute cannot at the same time belong and not belong to the same subject in the same respect,…".[26] In the ontological formulation, it is necessary to add the temporal qualification "at the same time".

In the logic of the modern age, these axioms have also been called laws of thought and formulated without temporal qualifications. The axiom of identity has been expressed this way: "A equals A." The axiom of non-contradiction hat been stated this way: "A does not equal non-A." If for "equals" we use the sign "=" and for "does not equal" the sign "≠", they will read: "A = A" and "A ≠ non-A." This is the psychological formulation of the axioms of identity and non-contradiction.

But modern logic in its mathematical shape, founded by Frege, no longer talks about laws of thought. It wanted to shed the subjective element and the "unhealthy psychological fast" or

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[24] Quine, Ontological Relativity, Chapter 1, 23.

[25] Butler, Sermons, Preface, § 33, 25.

[26] Aristotle, Metaphysics, Book 4, Chapter 4, 1005b19-20. Trans. Ross.

psychological burden attached to our opinions, ideas, judgments and inferences, and to penetrate to objective truth. Moreover, these axioms do not so much *de*scribe how we really think, but rather *pre*scribe how we ought to think. We can, of course, also think illogically.

However, logic is not the science of the most general laws taken to be true, but, according to an apt definition of Frege, "the science of the most general laws of being true".[27] From "the laws of being true there follow the laws about asserting, thinking, judging, inferring".[28] That is why logic can also be defined as the general science of inference.

Objectively, the propositions or sentences in which we express our thinking are available to anybody's perception. The two metalogical axioms are now regarded as propositions. They can be formulated in various ways, the metalogical axiom of identity, for example, as "p is identical to p", and the metalogical axiom of non-contradiction as "not valid: p and not p".

If we were to substitute a concrete proposition for the propositional variable p, we would each time obtain the same truth value for these laws, that is, the truth value true. That is why these laws are also called tautologies. Tautologies (from Greek *tautologeín*: to repeat what was said) say the same thing twice. In propositional logic, therefore, tautologies are forms of sentences in which every substitution of a concrete sentence for a propositional variable will result in the same truth value, that is, the truth.

Let us, for example, substitute the concrete proposition "It's raining" for the propositional variable p. Then the metalogical

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[27] Frege, Logic, 139. Transl. Long and White.
[28] Frege, Thought, 342. Transl. Geach and Stoothoff with small modifications by Ferber.

axiom of identity will be "'It's raining' is identical to 'It's rain-
ing'." The identity of the two propositions here means that both
are either true or false. It does not mean that the first proposi-
tion is true and the second false, or that the second is true and
the first false. Both propositions have the same, or identical,
truth value. That is why we also talk about the equivalence of
the two propositions, and may say: "'It's raining' is equivalent
to 'It's raining'." If we choose to render the phrase "is equiva-
lent to" by the sign for equivalence "≡" – three parallel lines, in
contrast to the two lines meaning equality – it will read: "'It's
raining' ≡ 'It's raining'" or, more generally, "$p ≡ p$". This
equivalence can also be expressed in terms of a reciprocal con-
ditional relationship: If the first proposition is true, the second
will also be true; if the first proposition is false, the second will
also be false and vice versa.

In the case of the metalogical axiom of non-contradiction,
the following substitution occurs: "Not valid: 'It's raining' and
'It's not raining'". The propositions "It's raining" and "It's not
raining" cannot be both true and false (at the same time and in
the same place). Rather than reciprocally determining each oth-
er, they reciprocally exclude each other. If "It's raining" is true,
then "It's not raining" is false. If "It's not raining" is false, then
"It's raining" is true. But the law of non-contradiction is always
true if we add the necessary conditions, for example, that it re-
fers to events in the same place and at the same time.

We may call these axioms metalogical truths because they
are present as presuppositions not only in Euclid's geometrical
axioms, but in the axioms of any special system of logic.[29] For
example, the two metalogical axioms mentioned above are pre-

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[29] To my knowledge, the term "metalogical truths" for these axioms was in-
troduced by Schopenhauer, Fourfold Root, § 33, 108. Transl. Hillebrand.

supposed in the first axiom of *Principia Mathematica* (1910-1913), the logical system created by Alfred North Whitehead (1861-1947) and Bertrand Russell (1872-1970): "1.1 Anything implied by a true elementary proposition is true."[30]

This axiom means that true premises result in true conclusions. Let us take the following conditional propositions as an example: "If it rains the road gets wet." Let us further assume that "it rains" is an elementary proposition. Then this principle means that if the premise "it rains" is true, then so is the conclusion "the road gets wet". Likewise, the validity of a deductive argument presupposes that the affirmation of the premises and the negation of the conclusion result in a logical contradiction, while the affirmation of the premises and the affirmation of the conclusion does not.

Of course, a radical sceptic could also deny the metalogical axioms of identity and non-contradiction. Even though there has hardly ever been such a sceptic, his position can be formulated as a hypothesis. In order to negate the metalogical axioms, he would first have to affirm them. If he said, "The axiom of identity is not true", he would be presupposing the following proposition: "'The axiom of identity is not true' is identical to 'the axiom of identity is not true'." But if he substituted the word "equivalent" for "identical", he would be assuming the proposition: "'The axiom of identity is not true' is equivalent to the proposition 'the axiom of identity is not true'." Here the word "equivalent" is only a different word for "identical" that expresses the identity of the truth value. In both cases, the radical sceptic would still presuppose the axiom of identity in order to negate it.

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[30] Whitehead/Russell, PM, Part I, Section A, 94.

But let us further imagine him saying: "The axiom of non-contradiction is not true." In that case, he would presuppose that the sentence "The axiom of non-contradiction is not true" and its negation, "The axiom of non-contradiction is true", are not true simultaneously. But by this presupposition, he will be affirming the axiom of non-contradiction. If he affirms the axiom of non-contradiction, he does not negate it. But if he does not negate it, even the radical sceptic can no longer advocate the negation of the law of non-contradiction. He cannot advocate negating it, because in order to advocate negating it, he has to affirm it.

If the radical sceptic could no longer advocate his own theoretical position, he would have to resign from any verbal debate with his opponent and be condemned to silence. Since he no longer advocated any theoretical position, he would indeed be irrefutable, albeit not because he was advocating an irrefutable theoretical position, but because he was no longer saying – and able to say – anything definite, for any proposition he made would also mean its opposite. At best, he would be able to express his position in body language, for example, by shaking his head doubtfully if somebody stated the axiom of identity or non-contradiction. But even this doubtful shaking of the head would convey an unclear meaning, as it could express either affirmation or negation.

In contrast, the metalogical axiom of the excluded third – which claims with reference to any sentence p: "p or not p. There is no third" – is not true of every system of axioms in logic and mathematics. It is not true, for example, in the system of Luitzen Egbertus Jan Brouwer (1881-1966). According to Brouwer, mathematical propositions can be considered true or false only if they are provable or refutable by means of a construction. But, when dealing with infinity, we cannot assume

that every mathematical sentence will be provable or refutable, with no third possibility between them.

For example, there are perfect numbers and imperfect numbers. A perfect number is a natural number that is equal to the sum of its divisors. Thus, the number 6 is perfect, since 6 = 1+2+3. The number 28 is perfect, since 28 = 1+2+4+7+14. So are 496 and six other even numbers, since their sum is also equal to the sum of their divisors. But so far, no odd number has been proved to be a perfect number. This does not mean that all odd numbers are imperfect. Rather, a sentence such as "All odd numbers are imperfect" is neither provable nor refutable by a construction, since there are infinitely many odd numbers. That is why, according to Brouwer, the metalogical law of the excluded third is not true in propositions about an infinity of numbers.

In my view then, axioms are true neither because they are always evident nor because they are laid down consistently, but because they are institutionalised in a language community. Those who fail to accept them do not belong to that language community. The institutions of a language community are not only laws of being true, *de*scribing what is the case in that community, but they are also rules *pre*scribing what should be taken for truth in that community. Thus, the institutionalist understanding of axioms shows not only why these axioms *are* true in a language community, but also why the members of the language community in question *ought* to follow these axioms.

This institutionalist view of axioms may seem sobering. But if it is true, there can be no absolute justification of the truth of axioms, but only a relative justification by the semantic institutions of the language community concerned. Naturally, these must be consistent and independent of each other. On the basis of this merely relative justification, in my opinion, we can no longer assert that axioms are timeless and true everywhere.

# IV. Truth

## 1. The Classic Definition of Truth

In the last chapter, I often used the terms "true" and "truth". But what is truth? The question was asked by Pilate when Jesus said to him: "To this end I was born, and for this cause came I into the world, that I should bear witness unto the truth."[1] Jesus seems to know what truth is, since he takes himself for the truth: "I am the way, the truth, and the life."[2] But Pilate, the unbelieving sceptic, retorts "What is truth?"[3] and does not even appear to be interested in an answer. A modern sceptic, Oswald Spengler, suggested the following answer:

> What is truth? For the masses, that which they continually read and hear. A poor devil may be sitting somewhere and collecting grounds on which to determine "the truth" – but what it obtains is just **his** truth. The other, the public truth of the moment, which alone matters in the material world of efficiency and success, is today a product of the press. What the press wants is "true". Its barons create, transform, switch truths. Three weeks of press work, and "the truth" is acknowledged by everybody. Its arguments are irrefutable as long as there is enough money to keep repeating them. Classical rhetoric, too, was designed for effect and not content [... ] but it limited itself to the actual audience and the moment. The dynamics of the press demands *permanent* effects. It must exert *continuous* pressure on people's minds. Its arguments are refuted as soon as the greater financial power shifts to the counter-arguments which are presented even more intensively to all eyes and ears. At that moment the needle of public opinion swings round to the stronger pole. Everybody is immediately con-

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[1] John XVIII, 37. Transl. King James Bible.

[2] John XIV, 6. Transl. King James Bible.

[3] John XVIII, 37. Transl. King James Bible.

vinced of the new "truth", and considers himself awakened from an error.[4]

Truth, then, is "today a product of the press". Obviously, by truth, Spengler means what is taken to be true. He is advancing a hypothesis about when "the masses" believe something to be true. The hypothesis may or may not be true, but we "poor devils" want to know something else – not when we regard an opinion as true, but what *the* truth, the objective truth, is.

Here we must make a distinction. When we say that someone is a true friend, we do not mean the same thing as when we say that a sentence is true. In the first instance, we mean that the person concerned is a genuine friend. In the second instance, for example, if we assume that a testimony in a court of law is true, we mean something different, namely, that it corresponds to reality. In the first instance, then, truth is a property of a person or a thing; in the second, it is a relationship between a sentence and the reality. The first is also called ontological truth, the second propositional truth.

To put it more accurately, in the second instance, it is not the sentence as such that is true, but the content of the sentence. If the sentence were true only as a sound sequence, a translation of it with the same content into another language would no longer be true. Since the sound sequence is different in different languages, the sentence as a physical form of expression cannot be true. What is true is the content of that form of expression. The content is also called a *proposition*. As a variable for a proposition, we will use a capital "P", "Q", "R", etc., and for a sentence, we will use a small "p", "q", "r", etc. In what follows, I will restrict myself to the second type of truth, that is, proposi-

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[4] Spengler, DW, Volume 2, Chapter 4, Section 3, 1139-1140. Transl. Atkinson with small alteration by Ferber.

tional, and not ontological, truth. As I have already spoken about the truth of mathematical and logical axioms, I will now concentrate on the truth of propositions about the external world.

A proposition is true if it corresponds to the facts; it is false if it does not correspond to them. The proposition "Snow is white" is true if the snow is white and false if the snow is not white. This conception of truth is based on correspondence and non-correspondence. Therefore, it is also called the correspondence theory of truth. It is a new formulation of the classic thesis that truth is the correspondence between knowledge and reality.

Aristotle, without using the Greek word for correspondence, put it like this: "To say of what is that it 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."[5]

What is remarkable about this definition is that if we resort to the correspondence theory in asserting the truth of a proposition, we do not even have to say that the proposition is true. By formulating a proposition, we are already saying that it is true. If, for example, we assert that "snow is white", we mean that it is true that snow is white. Conversely, if we assert that "snow is not white", we mean that it is true that snow is not white. Thus, by "P is true" or "P is not true", we say no more than we do by P alone. The claim of propositions to truth is so obvious that we do not even mention the word "truth" itself.

That is why we can omit the word "true", unless we want to stress specially that a proposition is true. However, in that case, the word "true" no longer has a descriptive function, but rather an emphatic or expressive one. For descriptive purposes, the

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[5] Metaph., Book 4, Part 7, 1011b26-28. Transl. Ross.

word "true" in connection with propositions about the external world appears to be superfluous or redundant. That is why we also speak of the redundancy theory of truth.[6] The redundancy theory supplies neither a definition nor a criterion of truth, but it demonstrates the obviousness of the claim to truth in terms of the correspondence theory. The redundancy theory of truth, therefore, is not an alternative to the correspondence theory. Rather, it is an indication of the obvious nature of the claim to the truth of propositions about the external world in terms of the correspondence theory.

## 2. Objections to the Classic Definition and Tarski's Reformulation

There are several objections to the definition of truth as the correspondence of proposition and fact.

a) The definition is circular. How do we know that it is true that truth consists in the correspondence between a proposition and a fact? We would need to know whether it really corresponds to a fact that the truth of a proposition consists in its correspondence with a fact. To be able to judge whether or not our definition corresponds to the truth, we would have to be able to compare our definition of truth with the truth.

b) The definition is not epistemologically neutral. It presupposes a naive epistemological realism which holds that an external world exists objectively and independently of human un-

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[6] This theory was first advocated by Frege: "Therefore it is really by using the form of an assertoric sentence that we assert truth, and to do this we do not need the word 'true'. Indeed we can say that even where we use the form of expression 'it is true that ...' the essential thing is really the assertoric form of the sentence" (Logic 140). Transl. Long and White. The theory became well-known through Ramsey, Facts and Propositions.

derstanding, for example, that snow is really white and is not merely perceived as white by us. The definition presupposes a naïve epistemological realism. But how do we know that a proposition corresponds to a fact "as it really is"? In order to decide whether or not the proposition corresponds to the fact, we would have to know the proposition and the fact independently of it. We would, as it were, have to assume the point of view of "the eye of God",[7] who is able to see the two separately from each other.

c) But as we cannot assume God's point of view, the definition turns into an endless series of returns to an endless array of facts, a *regressus ad infinitum*. We want to decide whether the proposition $P_1$, "Snow is white", corresponds to the fact that snow is white. To do so, we must first fix the fact in question in a proposition $P_2$. Only then can we decide whether or not $P_1$ corresponds to $P_2$. But how do we know whether or not $P_2$ corresponds to the actual fact that snow is white? To decide that – whether or not $P_2$ corresponds to the fact that snow is white – we must first fix the fact in question in a proposition $P_3$, etc. Therefore, we cannot decide whether or not the proposition corresponds to the fact by comparing the two, because we have no access to the fact apart from the proposition. Of course, we can see the white colour of the snow with our bodily eyes. But nobody has ever seen the actual fact that snow is white with his bodily eyes. The fact that snow is white does not exist apart from the proposition.

For these three reasons, we cannot adopt the classic theory, which claims that truth consists in a correspondence with reality, as it was originally formulated by Aristotle. However, there

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[7] The term "eye of God" is found, with a critique of the correspondence theory, in Putnam, Reason, Truth and History, 73-74.

is a method that allows us to retain the classic definition of truth, albeit only in languages whose structure has been precisely established in advance. The method was put forward by Alfred Tarski (1902-1983) in his treatise *Der Wahrheitsbegriff in den formalisierten Sprachen* (1935) (*The Concept of Truth in Formalised Languages*, 1956). Tarski talks about sentences because he believes that the concept of proposition is not clear and unequivocal enough. But his choice of terminology need not prevent us from understanding the principle behind his suggested solution. Naturally, Tarski does not have sentences in a merely physical sense – such as a sequence of sounds or printer's ink – in mind. He means sentences that make sense. Such sentences can only be true or false in derivative terms. Originally, only the sense of a sentence – the proposition – is true or false.

Tarski formulates the classic definition as follows: "(1) a true sentence is one which says that the state of affairs is so and so, and that the state of affairs indeed is so and so."[8] He sees the general pattern of true sentences like this: "(2) x is a true sentence if, and only if, p."[9] Here "x" is a symbol of any individual name of a sentence and p of the sentence itself. The expression "It's snowing" may serve as a concrete example of such a "quotation name" x of a sentence. It symbolises the sentence that it is snowing. Therefore, according to (2), the following is the case: "(3) 'It's snowing' is a true sentence if, and only if, it is snowing."[10]

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[8] Tarski, The Concept of Truth, § 1, 268. Emphasis in the original. Transl. Woodger.

[9] Ibid. Emphasis in the original. Transl. Woodger.

[10] Ibid. Emphasis in the original. Transl. Woodger.

If, instead of the quotation name x, we use the variable "p", a sentence "p" is true if, and only if, p. The truth of a sentence "p", therefore, consists in the elimination of the quotation marks, or, as Quine has put it, in "disquotation". The sentence "Snow is white", for example, is true if, and only if, snow is white. This equivalent relationship between "'p' is true" and p is also called the equivalence formula: "p" is true. ≡ .p.

(With the help of the notion "satisfaction", Tarski also gives a more formal definition of a true sentence: "x is a true sentence – in symbols x ∈ Tr – if and only if x ∈ S and every infinite sequence of classes satisfies x",[11] where S is the class of all meaningful sentences. This definition of truth depends on the notion of satisfaction, namely, the "satisfaction of a given sentential function by given objects".[12] These objects are classes of individuals. Satisfaction is a relation which assigns individual objects *a* to free variables. So, "for all a, a satisfies the sentential function x if and only if p"[13] means that we have to substitute for *x* an individual name of the sentential function, for example, "snow is white", and for *p* this function where all free variables in it are replaced by *a*. Then – in the given example – "for all a, a satisfies the sentential function 'x is white' if and only if a is white"[14] whereby snow, for example, is an *a* which satisfies the function "x is white".)

At first sight, this formula seems to be both trivial and merely a new formulation of the classic definition of truth. That is in fact how Tarski intended it. But the point of his reformulation is that truth is no longer a relationship between sentence

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[11] Tarski, 1983, 190.
[12] Tarski, 1983, 190.
[13] Tarski, 1983, 190.
[14] Tarski, 1983, 190.

and reality, but a relationship between two different sentences, one in object language, the other in metalanguage. A sentence in object language talks about extralinguistic objects; a sentence in metalanguage talks about the object-language sentence about the objects. An object can be any extralinguistic thing. Thus, the sentence in metalanguage is the expression "p" or "Snow is white." The object-language sentence is p or snow is white. Since this definition of truth is a semantic convention of how to use the expression "true", Tarski also called it the "semantic conception" of truth or simply the "Convention T". A convention sets constraints on an adequate definition of the meaning of an expression already in use.

The advantage of this definition of truth is that it is no longer tied to epistemological realism, but is epistemologically neutral, at least as Tarski intends it: "We may accept the semantic conception of truth without giving up any epistemological attitude we may have had; we may remain naive realists, critical realists or idealists, empiricists or metaphysicians — whatever we were before. The semantic conception is completely neutral toward all these issues."[15]

The "semantic conception" of truth says only what the term "true" means, and it only says this about sentences in languages whose formal structure has been precisely defined in advance. Thus, it has to be precisely indicated whether the sentence belongs to object language or metalanguage. For Tarski, "true" refers to a concept in metalanguage, where it is not redundant.

But the "semantic conception" is by no means intended to "establish the conditions under which we are warranted in asserting any given sentence, and in particular any empirical sen-

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[15] Tarski, Semantic Conception of Truth, 302.

tence".[16] It does not yield a criterion of the point at which we are entitled to maintain that a particular sentence is true. Therefore, the disadvantage of the "semantic conception" is that it provides only a definition of the term "true" or "truth", but no criterion of the truth.

In contrast, the classic definition of truth claims to offer both a definition and a condition or criterion of truth. It tells us both what truth is, namely, a correspondence with the facts, and also when we are entitled to uphold an empirical proposition, namely, when it corresponds to the facts. But the classic definition, as reformulated by Tarski, is acceptable only as a semantic definition of truth, and not as a criterion.

Therefore, any theories of truth based only on Tarski's equivalence formula seem to me to be inappropriate to the everyday and classic concept of truth. According to these theories, "true" is only a semantic predicate, meaning no more than what is contained in the equivalence formula "'p' is true. ≡ .p". In contrast, Tarski recognised, correctly in my view, that the classic concept of truth means more than the equivalence formula. Therefore, any theories built on Tarski's equivalence formula alone are called minimal.[17] Because of the inappropriateness of a definition of truth that does not provide a criterion of truth, we must look for other criteria.

## 3. Five Criteria of Truth

a) A first criterion seems to be coherence. An object-language proposition is true if it coheres with other object-

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[16] Ibid., 361.

[17] Such a minimal theory of truth is advocated, for example, by Horwich, Truth, cf. esp. Chapter 2, Section 4.

language propositions. Coherence means at least consistency, and consistency – in a weak interpretation – means at least the absence of contradictions. The object-language proposition that the sun revolves round the earth is true if it is consistent with a system of other propositions, say, the Ptolemaic system. On the other hand, the proposition that the earth revolves round the sun is true if it is consistent with the Copernican system.

The consistency of a proposition with the system can be interpreted, in a stronger sense, as meaning that the proposition can be logically derived from the system. Thus, it follows from the Ptolemaic system that the sun revolves round the earth, and from the Copernican system that the earth revolves round the sun.

What is correct in the coherence theory is that the truth of individual propositions is not independent of other propositions. Usually, the truth is not restricted to one proposition, but belongs to a system of propositions. It is an inadmissible simplification to isolate a single proposition and attribute truth to it alone. But the coherence theory tells us only whether a proposition is "true" or "false" within an accepted system. "The earth revolves round the sun", for example, is false within the Ptolemaic system. But the coherence theory obviously supplies no criterion when it comes to choosing between two coherent systems, for example, between the Ptolemaic and the Copernican. A proposition or a system of propositions may be "coherent". But is it true?

b) In the context of axioms, I introduced evidence as a further criterion of truth. But the evidence theory of truth is by no means confined to axioms. Propositions about empirical data can also be regarded as true, because empirical data are evident. Therefore, we have to distinguish between intellectual and sensory evidence. But, as we found with regard to axioms, there are also borderline cases of sensory evidence where evidence no

longer suffices as a criterion of truth. In Euclidean geometry, we saw this in connection with the ninth axiom, "The whole is greater than the part", and the parallel axiom. But it also applies to moral axioms. The authors of the American Declaration of Independence (1776) write in the preamble: "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness."

It is by no means self-evident that all men are created equal. If it were, it would be difficult to explain why Aristotle did not realise it. After all, he was convinced by the Euclidean axioms that I have mentioned. But in Aristotle's view, there are slaves by nature: "He who is by nature not his own but another's man, is by nature a slave, and he may be said to be another's man who, being a human being, is also a possession. And a possession may be defined as an instrument of action, separable from the possessor."[18] Not every slave by law is a slave by nature. But he is a slave by nature if he shares reason only to the extent of recognising it in others, but not of possessing it himself. Such a slave, according to Aristotle, may be kept almost like a domestic animal, since he has a similar function: Both slaves and domestic animals "with their bodies minister to the needs of life".[19] For Aristotle, then, slaves have the "inalienable right" to liberty as little as domestic animals do. What was evident to the Founding Fathers of the United States was not evident to Aristotle. What the Founding Fathers called self-evident was acquired evidence. Likewise, to us, it is largely evident that higher mammals may be kept like "slaves" to be domesticated, ex-

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[18] Pol. Book 1, Chapter 4, 1254a14-17. Transl. Jowett.
[19] Ibid., Chapter 5, 1254b25-26. Transl. Jowett.

ploited, slaughtered and eaten. Perhaps it will not be evident to later generations as it is now not evident for everybody.

Neither is sensory evidence – for example, the fact that a leg in water in a bath looks broken, or that the sun rises and sets – a valid criterion of truth. In reality, the leg is not broken and the sun neither sets nor rises. Some people regard it as evident that a conspiracy is taking place against them, if something does not go as they wish, although that need not be the case at all.

The main objection to evidence as a criterion of truth, therefore, is that evidence itself can hardly supply a criterion for distinguishing between genuine evidence and the subjective experience of evidence. Therefore, this criterion does not support the claims to objectivity made by its champions. Blaise Pascal (1623-1662) even suggests that reason makes it obvious that even the most obvious propositions should not be believed. This seems to be carrying scepticism too far. Evidence can serve very well as a prima facie criterion. But in most cases in which the evidence really goes unchallenged, it is only a sign that we agree about a proposition. A proposition or a system of propositions can be perfectly evident. But is it true?

c) The agreement of a group of people is the theme of the consensus theory of truth, advocated, for example, by Jürgen Habermas (born in 1929).[20] According to this theory, an object-language proposition is true if it can secure the agreement of all participants in a discourse characterised by the exchange of arguments. This does not mean that an object-language proposition is true simply because it carries the agreement of all. Those who journey towards the truth journey alone, as the proverb has it. But nobody tries to be left alone at the end of the journey. Even the consensus theorists know that it is possible for a truth

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[20] Habermas, Wahrheitstheorien, 211-265. No English translation.

to be recognised only by a minority or by an individual. There can be a truth before it has received the agreement of all or most. The tragedy of many creative people, from Socrates (469-399 BC) to Robert Mayer (1814-1878), the discoverer of the fundamental physical law of the conservation of energy, was that their insights were not accepted by their contemporaries. An assertion can be true in principle even if only one individual has recognised it. In the event of a miscarriage of justice, for example, the convicted defendant may be alone in being clearly aware of his own innocence.

The consensus theory of truth does not imply the possible agreement of all in all circumstances, but only in the circumstances of an "ideal speech situation". An "ideal speech situation" is one in which all possible participants in a discourse have an equal chance to carry out informative, argumentative, expressive and directive speech acts.[21] In concrete terms, this means that opinions are formed in a conversation of equals, in which nobody can force anybody else to agree either by material or moral pressure; in which all are prepared to be convinced by arguments rather than insisting on their own views come what may, simply in order to be right and to save face; in which the prestige of a person cuts no ice; and a great deal more. "The ideal speech situation", according to Habermas, is "neither an empirical phenomenon nor a mere construct but rather an unavoidable supposition reciprocally made in discourses."[22]

But when do we know that such a supposition has been realised? The mechanisms of power, of domination and of instinctive submission to authorities may operate so imperceptibly as to make it appear almost impossible to decide whether or not

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[21] For a continuing discussion, cf. ibid., Chapter 5, 252-260.
[22] Ibid., 258.

the process of agreement has taken place in an "ideal speech situation". Rather, the consensus theory of truth seems to be an ideal that ought to guide a discourse, but it does not supply a criterion for determining when a proposition is actually true. Habermas himself writes: "To the extent to which it suggests a concrete form of life, even the expression 'ideal speech situation' is misleading."[23] Nevertheless, the actual consensus provides us with a criterion as to when a proposition is recognised to be true. What is recognised or regarded as true *seems* to be true because it is probable or plausible. Aristotle put it like this:

> Things are "true" and "primary" which are believed on the strength not of anything else but of themselves: for in regard to the first principles of science it is improper to ask any further for the why and wherefore of them; each of the first principles should command belief in and by itself. On the other hand, those opinions are "generally accepted" which are accepted by every one or by the majority or by the experts – i.e. by all, or by the majority, or by the most notable and illustrious of them.[24]

What is believed to be true "by every one or by the majority or by the experts ", and among these "by all, or by the majority, or by the most notable and illustrious", can claim to be probable or plausible. But that is all that can be inferred from the actual consensus. The "most notable and illustrious" of the "experts", even if they agree, may be in error, not to mention the fact that the "experts" usually do not agree anyway.

The future consensus of the experts, even if it occurred in an "ideal speech situation", is neither predictable nor usable as a criterion of truth. The truth of a proposition, or of a system of propositions, may be such that, in an "ideal speech situation",

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[23] Habermas, New Obscurity, 161. Transl. Weber Nicholsen.

[24] Aristotle, Top. Book 1, Chapter 1, 100a30-b23. Transl. Packard-Cambridge, slightly altered by Ferber.

all experts, or at least "the most notable and illustrious", must agree about it. But is what follows from the agreement of experts necessarily the truth?

Consensus is only a consequence of a proposition, or a system of propositions, being true, but not a criterion for it. A proposition, or a system of propositions, may have obtained the actual consent of all in "real" circumstances, or the imagined consent in an "ideal speech situation". But is it true?

d) A further potential criterion is the pragmatic theory of truth. This was anticipated on several occasions before it was explicitly formulated by William James (1842-1910). Goethe, for one, writes in his poem "Legacy": "Only what bears fruit is true." James puts it as follows, although he does not talk about propositions, but ideas: "True ideas are those that we can assimilate, validate, corroborate and verify. False ideas are those that we cannot."[25] Truth, then, is not something static, but something dynamic. Essentially, it is generated by the process of verification. But the criterion guiding this process of verification or falsification is utility. "True ideas would never have been singled out as such, would never have acquired a class-name, least of all a name suggesting value, unless they had been useful from the outset."[26]

The criterion of the pragmatic concept of truth, then, is utility in the broadest sense of the word. Let us assume – to give an apparently plausible example – that we have lost our way in a strange city. In response to our questions, we are told how to find the shortest route to our hotel. This information is true if we actually find the hotel by the shortest route as a result of following it. According to the pragmatic theory of truth, the belief

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[25] James, Pragmatism, Lecture 5, 201. Emphasis in the original.

[26] Ibid., 204.

in the existence of an external world and the existence of other
people is true because it is useful for our lives in the broadest
sense. The same applies even to the existence of God: "On
pragmatic principles, if the hypothesis of God works satisfacto-
rily in the widest sense of the word, it is true."[27]

   Here it becomes clear that there is something unsatisfactory
about the pragmatic criterion of truth. A person who believes in
the existence of God will not believe in the existence of God
because that hypothesis works satisfactorily for him, that is, be-
cause it has a placebo effect. Perhaps it is only because he be-
lieves in the existence of God that he finds it easier to bear his
fate. Likewise, we do not believe in the existence of the external
world and of other people because such a belief is beneficial for
our lives. Rather, it is because we believe in the existence of the
external world and of other people that we are able to benefit
our lives and those of others and change the external world to
our advantage. The pragmatic criterion of truth seems to con-
fuse utility with truth. Truth can be useful, just as true informa-
tion can be useful. But it is not necessary that all useful infor-
mation is true, and it is not necessary that all harmful informa-
tion is false. True information, for example, "You have cancer",
may do more harm than false information, if it makes the pa-
tient worse. Likewise, false information, for example, "You
have the heart of a young man", may do an aging heart patient
more good than harm, if it improves his subjective well-being.
The hypothesis of God has proved useful for numberless people
by helping them bear blows of fate and deep suffering. But does
that make it true? Further, the substitution for truth of "what is
satisfactory in the widest sense" leaves uncertain what is satis-
factory "in the widest sense". The pragmatic criterion of truth is

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[27] Ibid., Lecture 8, 299.

too vague. But even if a proposition, or a system of proposi-
tions, were precise enough to be "satisfactory in the widest
sense", it would still leave the question open: Is it true?

e) Finally, the goal or ideal limit we approach by constantly
following the scientific method was chosen to be the criterion of
truth by Charles Sanders Peirce (1839-1914): "The view des-
tined by fate to be ultimately agreed by all researchers is what
we mean by truth, and the object presented by this view is the
real. That is the way I would explain reality."[28] The agreement
of all researchers suggests that Peirce also uses consensus as the
criterion of truth. However, his criterion of truth is neither an
actual agreement nor agreement in an "ideal speech situation",
but the ultimate agreement of all researchers, which lies in the
future. Undoubtedly, truth has a unifying effect, since ulti-
mately every reasonable person must agree with it. So Peirce
writes: "For Truth has that compulsive nature which Pope well
expressed: The eternal years of God are hers."[29] But this unify-
ing force does not necessarily produce truth. Apart from the fact
that it is not certain what the scientific method is, this theory
does not tell us when a concrete proposition, or system of prop-
ositions, is true. As we do not know this final state, we do not
know either whether a specific proposition is already true or, if
not, how far it is from the final state. Moreover, in principle,
scientific research can go on indefinitely. But let us assume that
the ultimate consensus has been reached. This still leaves the
question open as to whether a proposition that has reached the
ultimate consensus is true. The ultimate consensus could be the

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[28] Peirce, Pragmatism and Pragmaticism, § 407.

[29] Letter to Lady Welby, Dec. 23, 1908. The saying "The eternal years of
God are hers" goes not back to Alexander Pope (1788-1744), but to William
Cullen Bryant (1794-1878): "Truth, crushed to earth, shall rise again; The
eternal years of God are hers."

ultimate error and the terminal destiny of all researchers. Logically, a proposition can be false even if it has obtained the consensus of all future researchers. The final agreement of all, like the agreement in an "ideal speech situation", may be only a consequence, but not a criterion, of a proposition, or a system of propositions, being true. A proposition, or system of propositions, may have obtained the final consensus of all. But is it true?

## 4. The Plus of the Concept of Truth Over the Five Criteria

The open question that can be asked about all five criteria shows that none of them suffices for us to say that an object-language proposition P is true.[30] A proposition, or system of propositions, may be coherent, evident, suitable for consensus, satisfactory or enjoying the final agreement of all researchers. Nevertheless, we can still ask: Is this proposition, or this system of propositions, true? The concept of truth, then, contains a plus of meaning that is not exhausted by the five criteria. The concept of truth – to use a different word – supervenes (from *supervenire*: to come as something additional or extraneous) the

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[30] The argument appears in Moore, PE, Chapter 1, § 13-14, in connection with the question "Is pleasure (or whatever it may be) ultimately good?" in order to show that the meaning of "good" cannot be identified with that of "pleasure", 16. Here, I have applied the argument to the criteria of truth. As I have remarked later, this application has been anticipated under the name "idealistic fallacy" by Putnam, Reference and Understanding, 108, quoted in Rorty, Mirror of Nature, 308. Putnam has been anticipated by Moore, Refutation of Idealism, 450. The term "idealistic fallacy" goes back to Ralph Barton Perry (1876-1957) in his review of Moore, Refutation of Idealism, 1904. The conclusion of the argument appears also in Moore, PE, Chapter 4, § 80: "That 'to be true' *means* to be thought in a certain way is, therefore, certainly false."

five criteria of truth that I have discussed. It supervenes – or is superadded to – those criteria, but cannot be reduced to them.[31]

The term "supervene" helps us understand two things: first, that the concept of truth is superadded to the five criteria and depends on them to the extent that, without them, the truth as such would remain unattainable for us. Thus, with Tarski's equivalence model alone – "'p' is true. ≡.p" – we would be unable to grasp the meaning of the classic and everyday concept of truth. Second, the term "supervene" indicates that the concept of truth contains a plus over the five criteria of truth. The concept of the supervenience of truth expresses both the dependence of the concept of truth on the five criteria and the plus of the concept of truth over the five criteria.

This plus grants us an important insight: A proposition, or system of propositions, is not true for us if it is only true according to one of the five criteria, because we can still ask the question that has remained open. A proposition, or system of propositions, is ultimately true for us only when it is true in itself. For example, it is not true for us that we have hit the jackpot simply because this coheres with our other convictions, is evident or useful for us, and has obtained the consensus of our fellow humans. It is true for us only once the cheque has arrived.

But although the five criteria do not suffice to indicate when "P" is true, they are not worthless. Nevertheless, they are only prima facie criteria, that is, criteria that can be invalidated by other considerations. The cheque for the jackpot may not arrive

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[31] The concept of supervenience was introduced by Richard Mervyn Hare (1919-2002) for moral properties that come over natural ones. For an exact definition, cf. Hare, The Language of Morals, Chapter 5, Section 2, 82-83, Chapter 9, Section 3, 153-155. I understand the term here in the literal sense extending it to the concept "true".

even if its arrival is consistent with our other convictions. Conversely, a proposition can be true even if it is not consistent with a system of existing propositions, as was, for example, the proposition of the first person who said that the earth is not flat, but round. A proposition can be true even if it is not evident, as is, for example, the proposition that infinite sets have subsets equivalent to the whole set. It can also be true if it does not encounter any consensus in the discourse of experts, as happened, for example, to J R Mayer's proposition that motion turns into warmth. It can be true even if it leaves our feelings in the widest sense unsatisfied, as indicated by the saying "sad but true". Finally, a proposition could be true, even if it were never to obtain the ultimate consensus of all researchers.

We could try to establish other criteria of truth, for example, beauty or elegance. Thus, Nicolas Boileau (1636-1711) writes: "Nothing is beautiful but the true. The true alone is lovable." However, the same open question could be put to all further criteria of truth: The proposition may satisfy this new criterion, for example, the criterion of beauty, but is it true?

This inadequacy of all truth criteria has the important consequence that we have no satisfactory criterion for determining when an object-language proposition P is true. This was already known in principle in Antiquity. Xenophanes (c 570-c 475 BC) wrote:

> But as for secure truth, no man has known it, / Nor will he know it; neither of the gods, /Nor yet of all the things of which I speak. /And even if by chance he were to utter /The perfect truth, he would himself not know it: /For all is but a woven web of guesses.[32]

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[32] Popper, Better World, Chapter 2, Section 9, p. 34. Transl. Bennett. With small alteration by Ferber.

The "perfect truth" – if we may translate Xenophanes's idea into a modern language – can be understood to mean objective truth. Even if someone proclaimed the objective truth, he would not know it. Why? Because he has no criterion to recognise that proposition P is objectively true. We have to distinguish between the subjective process of taking things to be true and objective truth. Nevertheless, any truth P formulated by us rests on what we take to be true. The sceptical philosopher Sextus Empiricus (c 200-250) put it in the following image:

> Let us imagine that some people are looking for gold in a dark room full of treasures. It will happen that each will grasp one of the things lying in the room and think that he has got hold of the gold. But none of them will be persuaded that he has hit upon the gold even if he has in fact hit upon it. In the same way, the crowd of philosophers has come into the world, as if into a vast house, in search of truth. But it is reasonable that the man who grasps the truth should doubt whether he has been successful.[33]

## 5. The Classic Definition as the Decisive Criterion and the Ideal

So, when can we regard an object-language proposition P as true? When may we say that "Snow is white" is true? Having noted the fundamental inadequacy of those truth criteria that we discussed in detail, and also of some others, such as beauty, that we have mentioned in passing, it would not be sensible of me to look for yet another. We seem to be left with little choice but to return to the classic definition of truth: Truth is the correspondence of knowledge and reality, or of proposition and fact. We have seen that the classic definition of truth is itself a criterion

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[33] Cf. Sextus Empiricus, M, Book 7, Section 52. Transl. Barnes.

of truth (cf. p. 105). In my view, it is the decisive perspective by which to judge the other criteria. A proposition, or a system of propositions, may be coherent, evident, suitable for consensus, satisfactory and enjoying the ultimate approval of all researchers, but if it does not correspond to reality, it is not true. The classic definition of truth, then, can explain the concept of truth in such a way that it loses least of its meaning and at the same time acquires a meaning that is not rendered by the other criteria – coherence, evidence, usefulness or consensus – which reduce the truth to something ultimately subjective. That is why Popper could call them subjective theories of truth.[34] But if a proposition does not correspond to the truth, the concept of truth seems to have lost the objectivity that we attribute to it. The subjective theories of truth give to truth not "the place" – that is, the objectivity – "which is its due".[35]

Earlier, we voiced three objections to the classic definition. If we are to maintain that definition as the criterion of truth in spite of these objections, we must qualify it:

a) The circularity of the definition of truth is typical of all attempts at defining philosophical key concepts. We cannot define philosophical key concepts without presupposing them. It is true that, in order to define truth as the correspondence of proposition and fact, we must have a preconception of truth as correspondence. But this applies in principle to any other definition of truth. Since this is the case, we were able to ask the question whose answer remains open about each of the other criteria: If the proposition P fulfils one of these criteria, is it therefore true? Further key concepts, such as being or the good, are subject to analogous conditions. Frege is right to suggest

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[34] Popper, Conjectures and Refutations, Chapter 10, 225.
[35] Frege, Thought, 342, Transl. Ferber.

that it would be pointless to resort to a definition in order to
"clarify what is meant by 'true'".[36] The same, he says, holds for
all explanations in this form:

> A is true if and only if it has such-and-such properties or stands in
> such-and-such a relation to such-and-such a thing. In each case in
> hand it would always come back to the question whether it is true
> that A has such-and-such properties, or stands in such-and-such a
> relation to such-and-such a thing. Truth is obviously something so
> primitive and simple that it is not possible to reduce it to anything
> still simpler.[37]

Therefore, Frege would probably refuse to grant Tarski's re-
formulation of the classic definition of truth the status of a
genuine or explicit definition of truth. An explicit definition is
one that allows the replacement of what is to be defined – the
definiendum – with what defines – the definiens. In order to
maintain the classic definition of truth, then, we must not under-
stand it as an explicit definition of truth, but only as an implicit
one. An implicit definition can also be called an elucidation.[38]
An elucidation presupposes, expressly or tacitly, that the con-
cept that is being explained is already known.

b) The classic explanation of truth presupposes an epistemo-
logical realism, that is, a belief that we can recognise reality as
it is. It assumes that an external world objectively exists, for ex-
ample, that snow really has a colour and does not merely appear
to us that way because that is how we perceive it. We can avoid

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[36] Frege, Logic, 139. Transl. Long and White.

[37] Ibid., 140.

[38] Cf. Frege, Logic in Mathematics: "Definitions proper must be distin-
guished from *elucidations*. In the first stages of any discipline we cannot
avoid the use of ordinary words . . . We have again to use ordinary words, and
these may display defects similar to those that elucidations are intended to
remove." 224. Transl. Long and White.

this epistemological realism by reducing the classic explanation of truth to a hypothetical realism: by not claiming that a proposition corresponds to a fact "as it really is", but only that a proposition corresponds to a fact "as it appears to us". If we follow that approach, we need not know the proposition and the fact as two separate entities to decide whether or not they correspond to each other. We need not espouse the point of view of the eye of God. We need to know the facts, say, only as far as we have put them into words on the basis of our observations. The object-language proposition "Snow is white" can be compared with snow that is white to our eyes, if observed in the appropriate conditions. Whether snow is white, seen from God's eye view or in itself, is a question that we have not answered and we need not answer. God's eye view, seen from ours, would be something like a "view from nowhere". In contrast, all we are able to observe is a "view from somewhere", that is, a human perspective. From a human perspective, truth is not a relationship between a proposition and a fact in itself, but a relationship between a proposition and a hypothetical fact.

The classic explanation of truth came into being within an epistemological realism: "You are not white because we hold truly that you are white, but because you are white we who say so tell the truth."[39] Nevertheless, it is only valid within a hypothetical realism. It is only a hypothesis that snow is white. Seen against the sun, it may be yellow. This restriction must be paid for. We can no longer say whether a proposition, or a system of propositions, is true in itself. That is the second restriction.

c) We can also avoid the infinite regression by fixing the reality of the fact that snow is white within a hypothetical realism. In order to decide whether a proposition $P_1$ corresponds to a

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[39] Aristotle, Metaph., Book 9, Chapter 10, 1051b6-9. Transl. Ross.

fact, we must already have formulated that fact implicitly or explicitly in a proposition $P_2$. Only then can we assess whether or not $P_1$ corresponds to $P_2$. But we no longer ask how we know whether or not $P_2$ corresponds to the fact itself, because we stop at $P_2$. This provisional stop at a proposition that only reflects a hypothetical fact is the third restriction.

With the proposition "Snow is white", we have chosen a simple example, which allows us to study the problem of truth better than a complex one. Here the provisional stop at a proposition $P_2$ seems justified. Unless we have fallen victim to a collective trick of the senses, we may hypothetically assume that snow – observed in the appropriate circumstances – is white. But how about the truth, that is, the objective truth? Our striving for truth seems to remain unsatisfied until we have found the objective truth. That would be a proposition, or a system of propositions, that corresponds to "reality in itself". So long as we do not have that, we must expect objections, be it from others or from ourselves. The concept of truth demands an objectivity that cannot be supplied by a merely hypothetical objectivity.

What is objective truth may be totally irrelevant when we ask whether or not snow is white. In general we have anyway no doubt that snow is white: "For while the perception that there is white before us cannot be false, the perception that what is white is this or that may be false."[40] But in some cases it is very important to render a fact objectively, as for example, in a court of law. Every judge has the duty to discover the objective truth, as far as possible. It is the judge's natural working hypothesis that a fact – for example, a road accident – occurred in a certain way, even if it is no longer possible in retrospect to

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[40] Aristotle, De an., Book 3, Chapter, 3, 428.21-22.

recognise or reconstruct exactly what happened. But a simple task, such as the reconstruction of a road accident, can be difficult enough. Here, a provisional stop at a proposition $P_2$ may not be justified. $P_2$ may be based on a delusion and in need of revision by a proposition $P_3$. But proposition $P_3$ may need revising by $P_4$, etc.

It gets even more difficult with scientific or scholarly theories, be it about nature or history. Here, a proposition $P_2$ may need revising by a $P_3$, $P_3$ by a $P_4$, etc. – or a system of propositions $SP_2$ by $SP_3$, $SP_3$ by $SP_4$, etc. – into infinity. There is no supreme court that would put an end to the search for the truth. Nevertheless, it is a natural demand of common sense that there should be a "reality in itself", even if it cannot be recognised. And common sense is something scientists and scholars also want to have.

Let me demonstrate this again by means of a simpler example, the translation of a literary text. A literary text is a system of sentences. A sentence can render the original more or less faithfully or approach it more or less closely. In principle, this process of approximation can go on indefinitely. So we have many translations of classical texts. But a translator assumes that a sentence cannot be translated in any which way that may occur to him or her. Likewise, the translator assumes that a text has a meaning that needs to be translated. This meaning can be ambiguous. Nevertheless, the translator assumes an original meaning, even though every concrete translation is only a hypothesis.

The trouble with complex scientific theories, which may be far removed from sensory experience, is that they cannot be tested directly, but only indirectly as mediated by the "original" experience. For example, a theory about nuclear structure at average temperatures can be checked only very indirectly by data observed in a "cloud chamber". Quine even goes so far as to say

that theories can contradict each other and yet correspond to all kinds of sense data.[41] He calls this the underdetermination of a theory by experience. Here, it seems illusory to test the correspondence of these theories to even a merely hypothetical "reality". As both theories correspond to it, the correspondence cannot be a criterion for preferring one theory to the other. Here, the search for *the* truth seems to be hopeless, and we will probably have to content ourselves with mere coherence, consensus, beauty or usefulness in the widest sense of the word. In fact, these are prima facie criteria which are perfectly valid at first sight. Empirical scientists, for example, are often obliged to rely on a purely pragmatic criterion of truth. A scientific theory that has been corroborated can be perfectly appropriate and usable, even though we cannot know whether it is true.

Nevertheless, I believe that, also when dealing with empirical theories remote from direct sensory experience, we have to abide by the classic explanation of truth as a criterion – if for once we may disregard Quine's notion of underdetermination, for which it is difficult to find an example in normal scientific practice.[42] If a theory about empirical reality satisfies all the other criteria, but does not correspond to empirical reality, it is not true. However, the hypothetical realism mentioned before, and the provisional nature of any proposition, seems to make this natural demand impossible to fulfil. If we are to hold on to it, we must raise the classic explanation of truth from the level of reality to the level of an ideal. In fact, the classic concept of truth includes a value judgment that I have neglected so far. Georg Wilhelm Friedrich Hegel (1770-1831), for example, uses

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[41] Cf. Quine, Pursuit of Truth, Chapter 4, § 41, 95-98.
[42] Cf. Quine's examples, ibid., Chapter 4, § 41, 95-98.

it in this sense when he writes: "To an unbiased man, truth will always remain a great word and make his heart beat faster."[43]

Truth, as correspondence to a reality in itself, is only an ideal and unachievable. All that we can achieve is correspondence to a hypothetical reality. But there is a sense in which this ideal functions as a moral ideal, because it demands a certain disregard of our own angle of vision and our personal interest. The poet Ingeborg Bachmann (1926-1973) expressed this idea as follows: "You are imprisoned in the world, weighed down by heavy chains, but what is true drives cracks into the wall." It is an ideal that could also be described as objectivity with the meaning of "impartiality". What impartiality is will easily be understood if we remember Spengler's "definition of truth" as merely a "product of the press". If this were so, the end of the Soviet party newspaper *Pravda* – meaning truth – would have been the end of truth itself. A historian researching the causes of the Arabian revolution has to be as committed to this ideal as a physicist investigating the structure of a nucleus at an average temperature or indeed the safety of a nuclear plant. Personal or party interests may be a strong incentive to research, but they are not the kind of interests that scholars and scientists should pursue.

Naturally, we always see things from our own perspective. The perspective of truth corresponding to a reality in itself would only be available to God. Obviously, God's perspective cannot be attained by humans. The human striving for truth has been nevertheless compared to a striving for the divine, but there are times when we would be happy enough to come across a mere angel who told us the truth.

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[43] Hegel, History of Philosophy, Introduction, A, Section 1, b, 33. Transl. Haldane.

What humans can do is to try to disregard all personal prejudices and vested interests in order to represent a fact as it is. The method for achieving this is to compare our own propositions with the hypothetical facts and, if necessary, allow the latter to refute the former. Likewise, we must expose our own perspectives to criticism and, if necessary, allow them to be refuted by the perspectives of others. This search may, in principle, go on forever. That is probably the meaning of the infinite regression, whereby every proposition can be tested against a fact, that fact against a new fact, etc. What is finally achieved will still be no more than a hypothesis. But we have to stop somewhere, if only for external reasons.

Such a hypothetical realism goes hand in hand with a "naive" or "in-itself" realism, if we understand the latter as an ideal. But it is an ideal that has to guide the hypothetical realism of empirical research and theoretical reason. We can approach this ideal, even though we cannot reach it. By a normative reorientation, we are able to preserve the classic explanation of truth, with its plus meaning, albeit not on the factual, but at least on the normative level. The classic explanation of truth is more tied to the demand for knowledge rather than to actual knowledge itself, and as this demand cannot be abandoned, the classic explanation cannot be abandoned either.

What we take to be the truth can approach the ideal of objective truth in different degrees. No hypothesis can actually reach the ideal. But one hypothesis can get closer to the ideal by avoiding the mistakes of another. We cannot arrive at a positive definition of how close P, that is, the proposition we take to be true, is to the truth. We cannot measure the distance remaining between P and the unreachable truth. But we can define it in negative terms as the degree of its relative distance from error. The hypothesis that the earth is a globe is closer to the truth than the hypothesis that it is a disc, because it avoids the errors

of the first hypothesis. But the hypothesis that the lonely planet is a globe slightly flattened towards the poles – that is, a rotational ellipsoid – is closer to the truth than the hypothesis that it is simply a globe, because it avoids the errors of the second hypothesis, etc. Therefore, as time passes, we may still hope to get closer and closer to the truth. Truth and the morning are clearing little by little.

# V. Being

## 1. The Four Meanings of "is"

Having characterised truth as the correspondence of knowledge and reality, it is time to ask: What is real? One answer would be: everything that is. But what does "is" mean? Just as it was impossible to provide an explicit definition of the concept of truth, it is equally impossible to grasp the meaning of the term "is" by means of an explicit definition. In any definition like "the meaning of 'is' is such and such", we would be using the meaning of the term "is", which is precisely what we are trying to define.

The verbal noun that goes with "is" is "being". Either way, we are no more able to define explicitly the meaning of the verbal noun "being" than we are able to define the meaning of the finite verb "is". If we say "Being *is* such and such", we are again using the term that is to be defined as part of the definition. Through the meaning of "is", we imply that we understand "being", which is in fact what we are trying to understand. Faced with any explicit definition of being – for example, "Being is reality" – we could ask: Is reality per se the same as being? We would have to answer this question in the negative, since whatever is not real but only imagined also *is*. Like the concept of truth, being is another key concept of philosophy that cannot be explicitly defined. Therefore, we are only able to define the concept of being implicitly but not explicitly. Like the concept of truth, the concept of being can only be elucidated. In elucidating the concept of being, we can raise to consciousness what we already know about it in an undeveloped form.

Like the concept of truth, the concept of being is also *ambiguous*. When we say "Socrates is", the term "is" does not

mean the same as when we say "Socrates is a human being." In the first instance, "is" in the sentence about Socrates means that "Socrates exists"; in the second instance, it connects "Socrates" and "human being". In the first instance, the meaning of "is" is existential; in the second instance, it is copulative. The copulative meaning can be broken down further into three different meanings.

If we say "Socrates is a human being", we mean that Socrates is a member of a class, namely, the class of human beings. Instead of a "member", we may also talk about an "element". The term "class" in this context does not mean a specific social stratum, but a totality or a set. A class in this sense is the totality of the objects or creatures that share a common property. The class of human beings, for example, is the totality of those creatures who share the property of being human. We can refer to such a class either in the plural or in the singular. We can say, "Human beings are creatures" or "The human being is a creature." An individual human being – say, Socrates – is something concrete and visible. The class of human beings, in contrast, is something abstract, that is, something that has been "drawn out" from the individual and concrete human beings and is no longer visible. Thus, we have never seen that abstract property which is common to all human beings – the property of being human. What we have seen is only individual human beings.

If Socrates is a human being, he is an element in the class of human beings. If, further, a human being is a creature, the class of human beings is also included in the class of creatures. In the first instance, the term "is" indicates (a) an element relation; in the second instance, (b) a class relation. The difference is that in a class relation, the characteristics of the larger class are also those of the smaller. Just as, for example, the class of creatures is invisible, so is that of human beings. However, where an

element belongs to a class, the properties of the class are not necessarily also properties of the element. For example, while the class of human beings has no head, Socrates indeed had a head. We can further say that Socrates is Socrates. Then the copulative "is" means as much as (c) "is identical with".[1] Thus, the word "is" has one existential meaning and at least three copulative meanings; that is, it has at least four different meanings.

However, if "is" has four different meanings, that is not to say that it simply means a number of different things, that is, that it is homonymous. A homonym is a word that conveys a diversity of meanings, while its sounds and spelling remain the same. Thus, a "lock" can be a device for securing doors or a strand of hair, to give just one example. But "is" does not simply mean a number of different things. Rather, it has a main meaning to which the various other meanings are subordinated.

But what is the main meaning of "is"? Is it the existential meaning or one of the three copulative meanings? It seems to us that it is the existential meaning. To make a proposition such as "Socrates is a human being" true, we must assume that Socrates exists. If Socrates did not exist, the proposition would not be true. Therefore, a true proposition must have a referent in reality, even if the existence of this referent is only hypothetical. So we may ask: "Did Socrates exist?" Likewise, the truth of a proposition such as "The human being is a creature" presupposes the existence of a class, and the truth of "Socrates is Socrates" the existence of Socrates. That is a law of logic, which can be phrased as follows: If a proposition is true, it presup-

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[1] These three distinctions, as well as that between property and attribute, were worked out by Frege, cf. Concept and Object, 167-178. Transl. Geach and Black.

poses the existence of something about which it tells a truth. This is also called the law of existential generalisation. The truth of the proposition leads to the general conclusion that there is something to which the conclusion applies.

The copulative meaning of "is", then, in this logical sense, presupposes the existential meaning. Therefore, we may assume that of the four meanings of "is", the existential one is logically fundamental. Although the four meanings of "is" vary, "is" does not simply mean different things. Rather, the various copulative meanings of "is" are oriented towards *one* basic meaning, so to speak, as their focus. The term "is" has *one* focal meaning, the meaning of existence. This was first realised by Aristotle, even though he does not yet distinguish between the different meanings of "is" mentioned above and he calls the focus of the different meanings of "is" not existence, but substance.[2] The term "substance", as he uses it, can also be translated as essence.

The theory of what is is also called the theory of being or ontology. The Greek participle "*on*" means "what is" and the Greek noun "*logos*" also means "theory" or "study". The subject matter of ontology was first described by Aristotle in the following programmatic terms:

> There is a science which investigates being as being and the attributes which belong to this in virtue of its own nature. Now this is not the same as any of the so-called special sciences; for none of these others treats universally of being as being. They cut off a part of being and investigate the attribute of this part; this is what the mathematical sciences for instance do.[3]

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[2] Cf. Aristotle, Metaph., Book 4, Chapter 2, 1003a33-b10, Book 7, Chapter 1, 1028a13-30. Transl. Ross.

[3] Metaph., Book 1, Chapter 1, 1003a21-26. Transl. Ross.

Thus, the other sciences – mathematics, physics or biology – are partial sciences. They "cut off" a part from the whole and they explore what is only in so far as it is countable, mobile or alive. In contrast, ontology does not "cut off" anything from the whole and explores what is as it is. Therefore, it is not a partial or special science, but the science of what is common to all that is. All that is is. Therefore, being is common to all that is. Consequently, ontology, as the theory of what is as what is, is not a special discipline, but a universal one. It is the theory of all that is, in so far as it is. But since the existential meaning of "is" is primary, the fundamental question of ontology is: "What exists?"

## 2. Real Existence and Real Facts

The most obvious answer is probably: everything that can be experienced through the senses. Stones, plants, animals and human beings can be experienced through our senses. Therefore, we attribute real existence to them. We learnt in the last chapter that real existence, too, is only hypothetical. Nevertheless, subject to this qualification, we can attribute reality to everything that we experience through our senses. With this in mind, for the sake of simplicity, we can describe hypothetically real existence as real existence.

In agreement with everyday understanding, we define real existence as an existence that can be verified by sensory experience. We all have seen stones, plants, animals and human beings. That is why we say that stones, plants, animals and human beings exist. If we were asked whether stones, plants, animals and human beings really exist, we would answer: "Of course they do." For what could be more real than something we can see and touch? We all have carried stones, mowed lawns,

stroked cats and embraced human beings. The criterion of real existence is our ability to experience things through our senses.

But this criterion does not mean that only what we actually experience through our senses really exists. At the bottom of the sea, there may be many treasures that nobody has seen. Nevertheless, they really exist, because they may one day be seen and raised by a diver. Experience through the senses as the criterion of existence means that only what we can experience through our senses really exists. Conversely, what we cannot experience through the senses has no real existence. We have never seen a horse with wings, except in paintings. But a painted horse is not a real horse. A painted horse has no real existence, except perhaps in a fresco. Therefore, the criterion of what really exists is also the criterion of what does not really exist.

What really exists exists in connection with other things. This connection can come about in various ways. But the way it can come about is restricted by *categories*. Category (from *katēgoría*) literally means accusation, and also statement. We can state about Socrates that he is so and so tall, for example, 170 centimetres. His height falls into the category of quantity. We can state that he has a certain shape, for example, that he is stout. Girth falls into the category of quality. We can also state that at a certain time, he is in a certain place, say, at seven o'clock in the morning in the marketplace in Athens. Place and time fall into the categories of space and time. We can further state that he is doing something, for example, walking about, or that he is suffering from something, for example, freezing because he is wearing nothing but a sheepskin. Walking about and freezing fall into the category of acting and suffering. We can state that he has certain relationships with other people, for example, that he is married to Xanthippe and has three sons. Being married and having children fall into the category of rela-

tionships. Finally, we can state that he is a human being. That is the category of essence, inasmuch as it says what he is.

"Essence" is an ambiguous term. It has both a concrete and an abstract meaning. The concrete essence is the concrete Socrates, the Socrates of flesh and blood. The abstract essence, on the other hand, is what is left of Socrates once all flesh and blood has been "abstracted", that is, removed from the concrete Socrates. What is then left behind is what he has in common with all other human beings. Ultimately, that is the bare fact of his humanity. The term "substance" is as ambiguous as the term "essence". Like essence, substance can be either concrete or abstract. Concrete substance is the result of the coalescence of matter and form. Abstract substance is what is left, once matter has been eliminated. The division into categories also goes back to Aristotle.[4]

The number of categories identified by Aristotle is controversial. But the decisive thing is his realisation that things that exist occur in combination with other things that exist. The way in which things that exist can occur in combination with other things is predetermined by these categories. Categories, on the one hand, are the most universal concepts under which the predicates of a simple proposition fall. A simple proposition is one that consists of a subject, a predicate and perhaps object. A simple proposition is not composed of several clauses, but it can become part of a composite statement. But categories are not only the most universal concepts under which the predicates of a simple proposition fall. They are also the most universal genres under which things identified by linguistic predicates can be

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[4] Cf. Aristotle, Cat., On the category of substance, Chapter 5, 2b11-4b19.

classified.[5] They are the largest "drawers" in which we can "store" almost everything that is.

The combinations of the things that exist within categories are also called facts today. For example, it is a fact that Mr or Mrs Smith is so and so tall and has such and such a shape, happens to be in a specific place at a specific time, does or suffers something, or is a father or mother. When we talk about a fact, we do not say that it is, but that it is the case. As the world consists not only of individual beings but of combinations of beings, it is a sign of progress in thinking that Wittgenstein introduces his *Tractatus Logico-Philosophicus* (1921) with these words: "The world is all that is the case. The world is the totality of facts, not of things."[6]

A thing is, or exists, while a fact is the case. A thing is something that is; a fact is a combination of things that are. The combinations of things that are occur within the framework of certain possibilities. The possible combinations of what is with what is are limited by categories. We cannot connect willy-nilly anything with anything else. For example, we cannot say that Socrates is a prime number. That would be a category mistake, since the essence of Socrates does not fall into the category of either quantity or number. Likewise, we cannot say that Mr Smith or Mrs Jones is a square root, because the essence of neither Mr Smith nor Mrs Jones falls into the category of square roots, except perhaps in a figurative sense. Thus, the world is the totality of facts in so far as the world is everything that is organised in categories. Now we can formulate the question "What exists?" more accurately as: "What facts are the case?"

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[5] Cf. Aristotle, e.g. Metaph., Book 5, Chapter 6, 1016b32, Book 10, Chapter 13, 1054b35.

[6] TlP, § 1 and § 1.1. Transl. Ogden.

## 3. Physical Facts and Psychic Facts

The first facts that come to mind here are probably those that we can verify by the evidence of our external senses, for example, the fact that snow is white. That is a physical fact. It is true that we do not see the fact that snow is white with our eyes. But we do see the white colour of the snow, albeit, to put it more accurately, only the white colour of, say, a concrete snowball. The sense of sight, which provides evidence for this contention, is directed towards the outside. It is an external sense, like the other four. We will call facts that we can verify by the evidence of our external senses *physical facts.* We have learnt that physical facts – for example, that snow is white – are also hypothetical. However, subject to this qualification, we can simplify matters by calling physical facts real, even if they are real only in a hypothetical sense.

But we cannot supply evidence for all facts through our external senses. For example, I can see the white colour of the snow, but I cannot see the process of seeing as such. Nevertheless, it is a real fact that I can see a white snowball, hear the whistle of a marmot, smell the odour of a cigar, taste the juice of a lemon and feel for the key to my front door. It is a further real fact that I feel pain, say, if I am stung by a wasp. I can just about see the sting of the wasp, but the pain itself I can neither see nor perceive with any of my other external senses. However, as I still feel the pain, the evidence for the facts in question is supplied, not by my external perception, but by my internal or inner perception. Like external perception, inner perception requires the stimulation of my nerve ends. To use the somewhat dramatic image of one of my students: "The breakers of the world crash against the cliffs of my body."

Facts for which we can supply evidence solely by our internal perception we will call *psychic facts*. We can also call them

facts of consciousness. Consciousness is another concept that cannot be explicitly defined, but only elucidated. The concept of consciousness comprises everything that can occur in consciousness. In everyday life, we use the term in a narrower sense. Consciousness contains a diversity of things. Accordingly, philosophers have divided consciousness in diverse ways. In everyday life, we still speak about feeling, willing and thinking.

As it is not clear how the different faculties of the soul relate to each other, the pattern we may find most convincing is that introduced by Descartes, the founder of the modern philosophy of consciousness, in his *Meditations on First Philosophy* (1641) and adopted by Franz Brentano (1838-1917) in his *Psychology from an Empirical Standpoint* (1874). Descartes distinguishes (a) ideas, (b) judgments and (c) acts of will,[7] and Brentano follows him by distinguishing (a) representations, (b) judgments and (c) acts of will, which he also calls motions of the soul, interests, or acts of love and hate.[8]

The term "idea" (a) here means the same as representation. But the term "representation" is ambiguous. We can take it to mean either the act of representation or what is being represented, that is, the content of the representation. When we say that representations are a part of consciousness, we mean acts of representation. This concept of re-presentation, again, cannot be explicitly defined: An act of representation is anything I represent. Therefore, an act of representation – we may elucidate – is anything that can occur in our consciousness. A judgment (b) consists in our recognition of a proposition as true or false. Here

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[7] Descartes, Meditations, Meditation 3, Section 5, 36-37. Transl. Cottingham.

[8] Brentano, Psychology II, Chapter 6, § 3, 33-36. Transl. Rancurello et al.

we must distinguish between judgment and proposition. A judgment is something psychic and, like a representation, may vary from one person to another. In contrast, a proposition, that is, the content of a sentence (see p. 98), is nothing psychic, but we assume that it remains identical despite the differences between the psychic processes of different people. Thus, we may or may not recognise the theorem of Pythagoras as true, but the sense of the sentence "$a^2+b^2 = c^2$", that is, the proposition $a^2+b^2 = c^2$, is true regardless. An act of will (c) consists in our desiring something as good or avoiding it as bad.

According to this model, consciousness has different levels. The lowest level is that of (a) representations; the second that of (b) judgments; and the third that of (c) acts of will. Judgments require representations; acts of will require both judgments and representations. Without representations, I cannot regard anything as either true or false or desire anything as good or bad. Likewise, without judgment, that is, without evaluating something as good or bad, I cannot desire it as good or reject it as bad. If I desire an apple, I do so because I have explicitly or tacitly passed the judgment that it is good. If I avoid milk that has gone off, I do so because I have explicitly or tacitly passed the judgment that it is bad. As a rule, we do not desire or avoid "blindly" but "seeing", because our response is based on judgment. But this judgment need not always be explicit or pronounced. We sometimes find certain people appealing or unappealing, pleasant or unpleasant, "at first sight". As Shakespeare put it: "Who ever lov'd, that lov'd not at first sight?"[9]

What is the case in our consciousness is a fact of consciousness in the wider sense. A judgment pronounced, on the other hand, is a fact of consciousness in the narrower sense. Natu-

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[9] As You Like It, Act III, Scene 5, Phoebe.

rally, we are not conscious in the narrower sense of all facts of consciousness in the wider sense. I may see a face in a crowd without consciously taking it in. I may only become conscious of having seen that face before when I see it again later. It is an astonishing property of human beings – acquired in the course of evolution – to be able to remember faces, as opposed to masks or names. Similarly, I may feel a pain without becoming conscious of it, because it has not reached the intensity that would draw my attention to it. Only a stronger pain is a fact of consciousness in the narrower sense. Nietzsche quotes: "One burns something in so that it remains in the memory. Only something which never ceases to *cause pain* stays in the memory."[10]

I can affirm a proposition even without knowing about it explicitly. Any child who accuses his mother of contradicting herself tacitly affirms the axiom of non-contradiction. St Augustine (354-430) reports in his *Confessions* (c. 400): "I have personally watched and studied a jealous baby. It could not yet speak and, pale with jealousy and bitterness, glared at its brother sharing its mother's milk."[11] Although the infant has no word and probably no concept of jealousy, it seems to harbour jealous feelings of which it is not aware. The boy mentioned by Sigmund Freud (1856-1939) in *The Interpretation of Dreams* (1900) also seems to be unconsciously jealous: "So far the child has been the only one; now he is informed that the stork has brought a new baby. The child inspects the new arrival, and ex-

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[10] Nietzsche, Genealogy, Treatise 2, § 3, 311. Transl. Kaufman and Hollingdale with small alteration by Ferber.

[11] St Augustine, Confessions, Book 1, Section 7, 11. Transl. Chadwick.

presses his opinion with decision: 'The stork had better take it back again!'"[12]

We adults can also be swayed by motives of which we are not conscious. We may think that we are trying to help, but all we want is to steal the limelight. Conversely, we may think that we are acting out of a desire for recognition, but we are obeying purer motives than we ourselves believe. An act of will, that is, an act of consciousness in the wider sense, can be carried out without being accompanied by an act of consciousness in the narrower sense. On the map of our soul – as Kant put it in his *Anthropology from a Pragmatic Point of View* (1798) – only a few places are illuminated: "Thus, the field of *obscure* representations is the largest in the human being."[13]

A representation is obscure when it is not articulated in language. If on the map of our soul there are only a few illuminated places, it does not follow that there are no more places that could be illuminated. Nor does it follow that, if we were not conscious of a conscious act, we would be unable to articulate it. Just as there are things that I cannot perceive with my external senses, so there are acts of consciousness of which I am not conscious. At first sight, this seems to be a contradiction.

The contradiction is resolved if we say that a fact of consciousness in the wider sense need not be conscious to us in the narrower sense. But it must have the potential to become conscious. It will become conscious if we articulate it in language. But just as there are more physical facts than we articulate, there are also more psychic ones.

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[12] Freud, Interpretation of Dreams, Chapter 5, Section 4, (D), b, 213. Transl. Brill. Quotation without reference.

[13] Anthropology, AA, Vol. 7, § 5, 136. Transl. Loudon.

Gottfried Wilhelm Leibniz (1646-1716) goes so far as to say: "But a soul can read in itself only what is distinctly represented there; it cannot unfold all its folds at once, because they go to infinity."[14] But, in order to show that the unopened folds of the soul "go to infinity", we would have to articulate them in such a way that the articulation could continue indefinitely. How could we account for something that we are unable to articulate? In principle, having learnt language, we should be able to express whatever we may imagine; otherwise, we would not be able to imagine it.

This is also called the principle of expressibility.[15] Alternatively, we can call it the principle of articulability. It should be possible to articulate unconscious "knowledge". But articulating what I unconsciously "know" is not as easy as opening a closed hand. Every teacher has experienced how difficult it is, not only for children, but also for adults, to express what they already "know" at an unconscious level. Every child "knows" what milk tastes like. But can the child say what it tastes like? We all "know" what a piano sounds like. But can we say what it sounds like? Likewise, we all "know" unconsciously what the word "is" means. But to put that unconscious knowledge into language is very difficult.

For physical facts, we can supply evidence from our external perception; for psychic facts, from our internal perception. We can call both kinds of fact real, because we are able to provide evidence for both from our perception. This world view, which recognises two kinds of fact – physical and psychic – is often called dualistic. It goes back to Descartes, according to whose *Meditations on the First Philosophy*, human beings con-

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[14] Leibniz, Monadology, § 61. Transl. Arlew and Garber.
[15] Searle, Speech Acts, § 1.5.

sist of two things, extension and thought.[16] The extended thing is the body; the thinking thing is consciousness. I can experience my body through the intermediary of my external perception and my consciousness directly through my internal perception. But first I am directed outward. It is only when I turn back to myself that I experience my internal being.

It would seem that physical facts are more real than psychic ones. It would seem to be more real that snow is white than that I see the white colour of snow. It would seem to be more real that there is an external world than an internal world. But Descartes shows us that it is not so. It is actually easier for me to doubt all external perception than it is for me to doubt my internal perception. It is easier for me to doubt that snow is white than that I see the white colour of the snow. As we have seen, sensory evidence offers only a prima facie criterion of truth. If, according to Descartes, "it is prudent never to trust wholly those who have deceived us even once",[17] we can infer from a single case of deception by our senses that they could deceive us again.

Internal perception, then, seems less deceptive than external. In Shakespeare's *Hamlet*, Polonius reads out a letter from Hamlet to Ophelia: "Doubt that stars are fire,/ Doubt that the sun doth move,/ Doubt truth to be a liar. / But never doubt I love."[18] Hamlet is more certain of his love than of the sun and stars. He could say, with Prince Klemens von Metternich (1773-1859): "Of all realities the strongest for me is love." That the sun moves and the stars are fire could be merely a dream – as

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[16] Descartes, Meditations, 2nd Meditation, cf. esp. Sections 5, 8, 19-20, 23. Transl. Cottingham.

[17] Descartes, Meditations, 1st Meditation, Section 3, 9. Transl. Cottingham.

[18] Act II, Scene 2.

could be the white colour of the snow. But even then, we would be performing acts of consciousness, precisely in the form of dreaming. Psychic facts seem more real than physical ones, since we can doubt the existence of the latter more readily than the existence of the former. The existence of physical facts, therefore, is more hypothetical than that of psychic ones.

Following Descartes, Brentano writes: "However, besides the fact that it has a special object, inner perception possesses another distinguishing characteristic: its immediate, infallible self-evidence. Of all the types of knowledge of the objects of experience, inner perception alone possesses this characteristic."[19] This is true, if only in the sense that the evidence of inner perception is less deceptive than the evidence of external evidence. Nevertheless, the "immediate, infallible" evidence of internal perception is also merely prima facie evidence. We can not only be mistaken about our own feelings for other people – for example, love – but we can also doubt a sensation – for example, the sensation of pain, because we are capable of imagining pain.

But now a further objection arises: Could we not reduce the psychic facts to physical ones, so that we would be left with only *one* kind of fact, the physical? We would then no longer be dealing with a dualistic world picture, but with a monistic, physicalist one. Is it not the case that the psychic facts, as it were, are only garments of the physical? After all, every representation, every judgment, every act of the will is nothing but a cerebral process. This assumption marks the beginning of the great modern programme of research into the naturalisation of consciousness.

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[19] Brentano, Psychology I, Book 2, § 6, 128. Transl. Rancurello.

There are similar developments in modern science, where, for example, the phlogiston theory of combustion has been replaced with the oxidation theory. According to the former theory, combustible bodies contain a certain substance, phlogiston, that escapes in the process of combustion. According to the latter theory, the air itself contains a combustible part, called "flammable air", in fact, oxygen. Thus, it seems possible to replace the pre-scientific "phlogiston" of psychic fact with a certain kind of physical fact. Just as some phenomena perceived through our external senses appear to us different from their physical nature – after all, we do not perceive colours and sounds as light waves and sound waves – so certain cerebral processes appear to us only as psychic facts. Psychic facts, then, only seem to have a psychic existence. In reality, they are nothing but physical facts.

However, it cannot be said that this programme of naturalising consciousness has been a success. The reason is not that the science of the human brain is insufficiently advanced, but something more fundamental, that is, conceptual. Leibniz voiced the following objection:

> Moreover, it must be confessed that perception and that which depends upon it are inexplicable on mechanical grounds, that is to say, by means of figures and motions. And supposing there were a machine, so constructed as to think, feel, and have perception, it might be conceived as increased in size, while keeping the same proportions, so that one might go into it as into a mill. That being so, we should, on examining its interior, find only parts which work one upon another, and never anything by which to explain a perception.[20]

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[20] Leibniz, Monadology, § 17. Transl. Arlew and Garber.

This objection is circular, because it presupposes what it tries to prove. Nevertheless, it illustrates something peculiar to representations. A representation, that is, something psychic, cannot be explained by something physical, because the psychic is conceptually different from the physical. Facts are facts. But the evidence for physical facts is in the public domain, while the evidence for psychic facts is accessible only to me. The evidence for physical facts is given to me through the mediation of the external senses, the evidence for psychic facts directly through internal perception. Having an internal perception means possessing an internal perspective.[21] In contrast, we perceive physical facts only from outside. Therefore, if we could reduce psychic facts to physical ones, we would lose some of the conceptual content that we associate with psychic facts, that is, the internal perspective. Any reductionist explanation – for example, "Acts of representation are nothing but cerebral processes" – could be countered by asking: An act of representation may be nothing but a corresponding cerebral process, but is the corresponding cerebral process an act of representation?

I would answer this question in the negative, because we cannot exhaust the concept of the psychic by physical criteria. Perhaps we can localise a cerebral process if, say, we feel pain. But the pain itself is not a localisable part of the cerebral cortex. Also, the pain is accessible only to me. Only my behaviour in pain, like the relevant part of the cerebral cortex, is accessible to everybody. But my strained facial expression, like a part of my cerebral cortex, has no internal perspective. It is perceived from outside.

We can localise a cerebral process and even measure eye movements when we dream. But nobody else can perceive my

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[21] This has been made clear once more by Nagel, 1974, 435-450.

dreams as I do. Others can only perceive an account of my dreams. However, in that case, they do not perceive my dreams from inside, but from outside, because what they hear are the words I use to tell my dreams. Thus, Wittgenstein's remark, "An 'inner process' stands in need of outward criteria",[22] is correct. But no external criterion can exhaust the meaning we associate with the concept of an "internal process". Because of this conceptual irreducibility of the psychic to the physical, we cannot entirely dismiss this dualistic world picture.

## 4. Semantic Existence and Semantic Facts

There is a further kind of existence, which we cannot describe as real, because we cannot provide any evidence for it either through our external or through our internal perceptions. For example, we all assume that there are such things as numbers and combinations of numbers. Thus, we all believe that there is the number 1 and the combination 1+1=2. What we can experience through our senses are only materialised numerals, for example, the numerals on the face of our wristwatch. But if we say 1+1=2, we do not mean that the numeral 1 on our wristwatch, joined to the numeral 1, results in the numeral 2. The numeral 1, joined to the numeral 1, would only result in the numeral 11. Rather, we mean that the meaning of the numeral 1, added to the meaning of the numeral 1, results in the meaning of the numeral 2. We obviously assume that the numerals 1 and 2 have a meaning. It is only to the meaning that we ascribe an existence when we say that there is a numeral 1 or that 1+1=2 is valid. We further ascribe existence to classes, for example, the class of human beings, which I mentioned before. Classes can

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[22] Wittgenstein, PI, § 580. Transl. Anscombe et al.

also be combined. If, for example, we say "The human being is a creature", the class of human beings is included in the class of creatures.

According to a hypothesis championed by Whitehead and Russell in *Principia Mathematica*, numbers are classes of classes.[23] 1would be the class of all unit classes, 2 the class of all two-membered classes, 3 the class of all three-membered classes, etc. A unit class [x] is the class that contains x as the sole element. It must be distinguished from that element x, because it has at least one property that the element does not have – it contains an element. The class of all unit classes is the class of all classes that contain x as the only element. The class of all two-membered classes is the class of all classes that contain x and y as the only elements, where x≠y. The class of all three-membered classes is the class of all classes that contain x, y and z as the only elements, where x≠y≠z, and so on.

What kind of existence do classes and classes of classes have? Obviously, nobody has ever seen, heard, tasted, felt or smelled a class or a class of classes. Classes cannot be experienced though our external perception. But can they perhaps be experienced through internal perception? A possible answer, attributed to Plato, is that we grasp invisible things, such as classes, not with our bodily eyes, but with our "mind's eye". This "eye of the soul"  is an intellect that does not infer but that, like our bodily eye, is supposed to have the ability to see things directly. However, what it sees is not the visible but the invisible. The paradox of how we can "see" the invisible seems to be resolved as follows: We see the invisible not with our bodily eye, but with our mind's eye.

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[23] Cf. PM, Part II, Section A, § 52.

Now the hypothesis of a mind's eye is a wonderful image of how we perceive things for the existence of which we cannot produce any sensory evidence through external experience. But granting any reality to the image would impose a burden of proof on us that we would hardly be able to supply. Even our bodily eye does not perceive things directly, but sees something as something (cf. p. 57). Why should what is true of the bodily eye not also be true of the mind's eye?

Further, to repeat Wittgenstein, an "internal process", such as an intellectual vision or intuition, needs external criteria. But what external criterion could there be for an "intellectual intuition" of my own? If I have such an experience, I cannot show its existence to others, who do not have it and who do not believe in it, by means of an external criterion. If others have it, and I do not, they cannot show it to me either by means of an external criterion. The hypothesis of an intellectual intuition can be neither verified nor falsified intersubjectively. It is accessible to introspection only and is thus of a private nature. This leaves the subjective will of the observer with substantial room for manoeuvre. The wings of intellectual vision may raise us above reality and above our fellow humans. But do they not also resemble the wings with which angels cover their eyes?[24]

If I claimed to have a special vision that others do not have, I would hardly be able to convince those who do not have it. If anything could convince them, it would be their belief in an authority. An intellectual vision is a metaphorical auxiliary construction to explain the paradox that we can "see" things that we cannot see. However, to infer from the metaphor of an intellectual vision the reality of that vision would be a mistake. Thus,

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[24] Cf. Isaiah, VI, 2, King James Bible: "Above it stood the seraphim each one had six wings; with twain he covered his face."

both intellectual and sensory vision must be ruled out as means of registering invisible classes. How, then, do we register the invisible?

Actually, Plato himself probably knew that this intellectual vision was a metaphor when he said that only the best soul "which following God becomes likest to him"[25] can see the invisible in a "place beyond heaven", [26] but even that soul sees it " with difficulty".[27] He also said: "Immaterial things which are the noblest and greatest, are shown only clearly through *logos*, and in no other way."[28] The word "logos" literally means "speech", but in Plato it can also mean "explanation", "definition" or "argument". If the only way to show "the noblest and greatest" things clearly is through *logos*, this can only happen through speech, explanation, definition or argument and not through either sensory or intellectual vision.

But here I will take the literal meaning of "logos" as my starting point. The human being (as a class) or numbers are abstract concepts. By means of language, we are able to create any number of abstract concepts, for example, by converting adjectives into nouns. For example, we can take the adjective "red" and make up the abstract noun "redness". Likewise, we can turn the adjective "white" into the noun "whiteness". Then, instead of saying "Snow is white", we could say "Snow contains whiteness." If we then formulate true propositions about such abstract concepts – for example, "Whiteness is a colour", "The human being is a creature" or "1+1=2" – we follow the law of existen-

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[25] Phdr. 248a. Transl. Ferber.

[26] Phdr. 248a. Transl. Ferber.

[27] Phdr. 247c. Transl. Ferber.

[28] Plt. 286a. Transl. Jowett altered by Ferber. For this passage, as well as a critical interpretation of intellectual vision and the "light in the soul", in Plato, cf. Ferber, 2007, 47-51, 106-120.

tial generalisation by assuming that there are classes such as the class of whiteness, the class of human beings and the class of all unit classes or all two-membered classes.

However, these abstract concepts do not exist in the real world, but in our way of representing the real world in abstractions, in language. Abstract concepts are not linguistic phenomena in the same way as words are if we regard them as mere sounds or letters. But they are linguistic phenomena in the same way as the meanings of words. What, then, is left if abstract concepts have no real existence? Obviously, the meanings of abstract words.

Even a sceptic who believes that abstract words have no meaning would assume meanings of these words. To be able to say, for example, that the abstract term "human being" has no meaning, he would still have to assume an interpersonal meaning for that term. The meaning of words is the subject matter of semantics. Therefore, abstract concepts have no real, but a semantic, existence.[29]

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[29] The term "semantic existence" is introduced in Ferber, *Normatives 'ist', Sein Gottes und Leibniz-Schellingsche Frage*, 390-391. The distinction I make there between real and semantic existence roughly corresponds to that between "existing" (*hypárchein*) and "subsisting" (*hyphístasthai*), represented by the Stoics (cf. SVF IIi, 322, 488, 541) and in the 20th century still by Russell (cf. Problems, Chapter 9), but I try to define the concept of subsistence more precisely by means of Frege's theory of the sense becoming the referent. Quine objects to the distinction between two meanings of "there is", stating that "the distinction between one meaning of 'there is' for concrete objects and another for abstract ones – given only one sense of 'there is' for both – makes no sense", Word and Object, § 49, 242. Quine seems to assume that the concept of being can explicitly be defined by "only one sense of 'there is'" and that it is the genus of which the being of concrete things and the being of abstract things are species. However, I am not saying that the concept of being can be explicitly defined (cf. p. 129), but only that our everyday understanding of being can be implicitly elucidated by the distinction between real and

Real existence is an existence that can be verified by the evidence of external or internal sense perception. Semantic existence, as I define it, is the existence attributed to the meaning of an expression – the meaning of "human beings" in " The human being is a creature" or the meaning of the numeral "1" in "1+1=2" – which, in the absence of a referent that can be experienced in reality, itself becomes the referent. By this definition, I am extending Frege's apt remark "The indirect reference of a word is accordingly its customary sense"[30] to abstract concepts. The "indirect reference of a word", in Frege's terminology, means the referent of a word in indirect speech. In indirect speech, I speak about the speech of another. If, for example, I say "John told me that he was at home", my indirect reference is to the fact that John is at home. My direct reference, on the other hand, is to John's telling me that he is at home.

The same applies to abstract objects, where the object is not an object of the external world but the meaning of the expression in question. For example, if we say "The human being is a creature", the term "human being" does not refer to a specific individual in the external world, say, to Jack, but rather to the meaning of "human being" in "The human being is a creature." Similarly, by saying "The class of human beings is included in that of creatures", we do not refer to a specific fact in the external world, but rather to the content of that sentence. The content of a sentence is also called a proposition. By such a sentence, therefore, we refer to a proposition.

But if we say "1+1=2", the term "1" no longer refers to a specific thing – say, a stone – in the external world, but to the

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semantic existence. But in an implicit definition or elucidation, the definiendum may recur in the definiens.

[30] Frege, Sinn and Bedeutung, 145. Transl. Geach and Black.

meaning of the term "1". Likewise, by "1+1=2", we no longer refer to two specific things in the external world. Rather, we refer to the proposition "1+1=2".

Thus, in such sentences about abstract concepts, the referent is no longer a thing in the real world, but the content of the sentence, that is, the proposition itself. We can call this the reification of propositions, which turns them into facts. Naturally, we cannot see this referent, or this combination of referents, either with a bodily or with a mind's eye. If, regardless of this, we say that these referents exist, we are asserting that the meanings of the corresponding expressions, or the contents of the corresponding sentences, exist. Propositions such as "The class of human beings is included in that of creatures", or "1+1=2", are not real facts. However, as it is nevertheless the case that the class of human beings is included in the class of creatures, and that 1+1 equals 2, we can still talk about facts. But they are *semantic facts*. By the act of linguistic reference to such facts, the meanings of the expressions themselves are *made* into facts.

Thus, semantic existence, unlike real existence, is an artificial one, created by human beings. Semantic facts are manufactured facts. They are the reified rules for the use of abstract expressions. Once we have turned them into facts, these meanings, or combinations of meanings, gain a status that is analogous to that of natural facts – but only an analogous status, for these semantic facts have no real existence. Nevertheless, once we have turned them into facts, they exist *as if* they were to be found in nature. They exist *as if* they were independent of the circumstance that they came into being only thanks to the human ability to create the relevant abstract terms.

Once they have gained this seemingly independent status, it is possible to forget their human origin and to believe that they are really independent. Then it might be asked where they exist and how they can be perceived. Since these meanings, or com-

binations of meanings, cannot be found in the empirical world or perceived through our external senses, some philosophers – called Platonists – hit upon the idea that their "home" was in an invisible world that we could only see with a mind's eye. Plato himself, however, seems to have known that such ethereal things can clearly be shown only by speech, explanation or definition "and in no other way" and that the mind's vision of these ethereal beings is attached to speech or occurs "always with true logos".[31]

Thus, in addition to real facts – whether physical or psychic – we have to reckon with semantic facts. There can be as many of them as there are reifiable meanings. As these meanings are not verifiable by internal or external experience, they can be multiplied indefinitely. The realm of semantic facts is limited only by the rule that they must not logically contradict themselves. We may not only assume that there is the class of all unit classes, two-membered classes and three-membered classes, but we may also assume that there is the class of all four- or five-membered classes, etc., all the way to the class of that class which contains an infinity of elements. With Cantor, we may even assume an infinity of classes of classes that again contain an infinity of elements. But no intellectual intuition is able to visualise an infinity of classes with an infinity of elements. Classes and hierarchies of classes have a semantic existence only because we can meaningfully talk about them. A round square, on the other hand, has not even a semantic existence, because a round square is not something that we can meaningfully talk about. A round square is not a square. The corresponding expression "round square" has therefore no possible reference except in a rhetorical sense when we say that we have

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[31] Ti.51e

to round a square or to square a circle. Then we mean that we have to face not an impossible but a very difficult task. For semantic existence, Hilbert's criterion of existence (cf. p.86) is a necessary and sufficient criterion, whereas for real existence, it is only a necessary criterion but not a sufficient one. Since semantic objects can, in principle, be multiplied at will, some philosophers conceived the idea that they should not be allowed to proliferate. William of Ockham (1290-c. -1349) coined the phrase: "Entities should not be multiplied unnecessarily."

## 5. The Being of Universals, the Being of Fictitious Things and the Being of Nothingness

### a) The Being of Universals

The concept of semantic existence allows us to express a view on the so-called problem of universals. Aristotle defines the universal as "that which is by its nature predicated of a number of things".[32] Therefore, the meanings of universal names are also universal, since they refer to several particular things. For example, the meaning of the universal name of "human being" applies to several individuals, if we say that Socrates is a human being, that Plato is a human being, that Aristotle is a human being, etc. Universal names are not only nouns, such as human being, house, etc., but also adjectives, which may denote either properties or relationships. We can say, for example, that Socrates is so and so tall and older than Plato, that Plato is so and so tall and older than Aristotle, that Aristotle is so and so tall and older than his pupil Theophrastus, etc. The words "tall" and "older" are used for several men. In

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[32] De int., Chapter 7, 17a38. Transl. Ackrill.

fact, most of the words in our sentences are universals. The problem of universals is the way in which this common element exists. Porphyry (232-305), in his *Introduction* (after 268) to Aristotle's theory of categories, formulated the decisive options as follows:

> I shall not say anything about whether genera and species exist as substances, or are confined to mere conceptions; and if they are substances, whether they are material or immaterial; and whether they exist separately from sensible objects, or in them immanently. This sort of problem is very deep, and requires a more extensive investigation.[33]

Nevertheless, let us venture to say a word about this problem in a smaller treatise, even though we are unable to plumb its entire depth at this point. Genera and species are classes. Genera constitute the class, species the subclass. In the statement "The human being is a creature", the universal name "human being" denotes the species or the subclass, and the universal name "creature" denotes the genus or the class.

Regarding the universals' mode of existence, Porphyry distinguishes two possibilities. One (a) is called universal realism. It was advocated especially by Plato and Aristotle. According to this position, genera and species really exist, although they obviously have no bodies. The other (b) is called universal conceptualism. In modern times, it was championed by, among others, John Locke (1632-1704). According to this position, genera and species exist only in our minds, as thoughts or concepts.

There is a third position, not mentioned by Porphyry, namely, (c) universal nominalism. Like conceptualism, nominalism holds that in reality there are only particular things. But

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[33] Introduction, 1a8-12. Transl. Edghill.

in contrast to conceptualism, it regards genera and species as existing in name only. If names are regarded as nothing but sounds or letters, universals exist only as a *flatus vocis*, that is, a "breath of the voice". But this position is so extreme that – as with the negation of the propositions of identity and non-contradiction – I doubt that anybody has seriously advocated it. According to the nominalist, the universal name "nominalist" itself would only be a "breath of the voice". And the nominalist's voice would only be able to "breathe" the name of nominalism without making it intelligible either to others or to himself.

In fact, some of the philosophers remembered under the heading of nominalism, for example, Ockham (cf. p. 154), incline towards conceptualism. In contrast, Quine, who is regarded as a nominalist, even assumes the existence of abstract objects, at least as a useful myth, for "science would be hopelessly crippled without abstract objects."[34] Classes, too, are abstract objects.

Under the first item of the above taxonomy, (a) realism, Porphyry again distinguishes two possibilities: Either (a') the genera and species are separate from the bodies or (a'') they exist in, and are dependent on, the bodies. The first (a') of these possibilities is Platonic universal realism; the second (a'') is Aristotelian universal realism. Thus, we can distinguish between (a) universal realism, (b) universal conceptualism and (c) universal nominalism, with (a) realism breaking down into the (a') Platonic and the (a'') Aristotelian variant.

According to the Platonic (a') variant, "we usually assume one distinct form for each group of many things to which we

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[34] Quine, From Stimulus to Science, Chapter 3, 40.

apply the same name."[35] "Eidos", or "idea", rendered here as "form", is Plato's word for what we call universals or classes today. The Platonic ideas exist as independent essences or substances, of which the following predicates are true: "Uncreated and indestructible", "admitting no modification", "imperceptible to sight or the other senses", they are "the object of thought."[36]

The Platonic ideas, then, are not ideas in today's sense of subjective representations. Rather, they are something objective. Thus, even if there were no individual human beings, the universal concept of "human being" would exist as an "uncreated and indestructible" substance which cannot be perceived either by our bodily eyes or in any other way, but which is destined to be seen by thought. Conversely, the visible Socrates is not an independent and unmodifiable substance but only a created and destructible phenomenon that we can perceive with our eyes or in other ways.

According to the Aristotelian variant (a''), Plato is right in so far as he assumes the existence of one universal concept for the many things to which we apply the same name. It is also Aristotle who explicitly introduces the distinction between genus and species.

For Aristotle, essence or substance is what underlies any given genus and is "neither said of a subject nor in a subject, e.g. the individual man or the individual horse".[37] Thus, the concrete human beings of flesh and blood underlie the genus of human beings, and we do not say "The human being is Socrates or Socrates is in the human being", but vice versa, "Socrates is a

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[35] R.596a. Transl. Ferber.
[36] Ti. 51a. Transl. Ferber.
[37] Cat., Chapter 5, 2a12-14. Transl. Ackrill.

human being and being human is in Socrates." On the other hand, the genera and species, for Aristotle, are substances only in a secondary or abstract sense.

Unlike Plato, Aristotle does not regard the substances as independent entities, but only as dependent predicates: "For it seems impossible that any universal term should be the name of a substance."[38] The first, or concrete, substance is something particular, and only the so-called second, or abstract, substance is something universal. The universal which is said of the particular has no independent existence, but is only a quality of that particular. If, for example, we say "Socrates is a human being", we refer to a quality of a particular individual, namely, the quality of being human or the fact of being a member of the species. But being human, or a member of the species, does not mean a particular individual, say, the visible flesh-and-blood Socrates. Rather, it is a quality which distinguishes the human species from others. It is the "occurrence of an essence" in a particular individual.[39] We can mentally perceive this universal quality in Aristotle in the same way as we do the ideas in Plato. Thus, by a kind of induction, we see in Socrates something universal, namely, a human being: "Thus it is clear that it is necessary for us to become familiar with the primitives by induction; for perception too instils the universal in this way."[40]

This brings Aristotle close to conceptualism. However, for this position, contrary to the views of Plato or Aristotle, the universals are not real, but exist only in thoughts or representa-

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[38] Metaph., Book 7, Chapter 13, 1038b8-9. Transl. Ross.

[39] Expression from Donald Cary Williams (1899-1983), cf. Ferber, Metaphysische Perle.

[40] Analytica posteriora, Chapter 19, 100b4-5. Transl. Barnes.

tions. Locke writes in *An Essay Concerning Human Understanding* (1690):

> To conclude: this whole *mystery* of *genera* and *species*, which make such a noise in the schools, and are with justice so little regarded out of them, is nothing else but abstract *ideas*, more or less comprehensive, with names annexed to them. In all which, this is constant and unvariable: that every more general term stands for such an idea, and is but a part of any of those contained under it.[41]

To give an example: The name "human being" stands for the idea of a human being and contains only part of what we mean by that concept. But while for Plato the term "eidos", or "idea", means something objective that exists independently of human beings, for Locke it means something subjective that is created by human beings. In contrast to Aristotle's view, however, for him the universals do not exist as real in the particular.

We can sum up the comparison by means of a medieval characterisation: For Platonic realism, the universals exist "before the things"; for Aristotelian realism, they exist "in the things"; and for conceptualism, they exist only "after the things".

According to the above assumption, classes have no real, but only semantic, existence (cf. p. 151). Genera and species, being classes, likewise have no real, but only semantic, existence. We obviously do not see the meaning of words with our bodily eyes. Thus, nobody has ever seen the meaning of the universal terms "human being" or "creature" with a bodily eye, either as something separate from, or as something real within, the world of the senses.

The existence of an intellectual intuition is too uncertain to provide a starting point (cf. p. 149). Only a soul that is not in-

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[41] Locke, Essay Concerning Human Understanding, Book 3, Chapter 3.

carnate could perhaps be assumed to be capable of seeing not only particular things, but also something universal without a universal name, that is, without a linguistic symbol. But the existence of a soul without a body is even less certain than that of an intellectual intuition. And even if there is such a thing as an intellectual intuition, and if universals exist as independent entities, there still remains the open question: How are we to imagine the relationship between these universals and the sensory phenomena?

Plato uses a diversity of images, such as the participation of sensory phenomena in the ideas, or the reproduction of ideas in the sensory phenomena. The metaphor of participation suggests that the ideas exist beyond and apart from the sensory phenomena, while the metaphor of reproduction suggests that they are contained within them. But if the transcendent ideas are within the sensory phenomena, then the *one* idea is either "dispersed and multiplied in the infinity of the world of generation" or "as still entire and yet divided from itself, which latter would seem to be the greatest impossibility of all, for how can one and the same thing be at the same time in one and in many things?".[42] Thus, the relationship between ideas and sensory phenomena leads us into a contradiction. Plato's possibly last word on the matter in *Timaeus* is that sensory phenomena are "the imitations of real existences [that is, ideas] modelled after their pattern in a wonderful way which is hard to explain and which we will hereafter investigate".[43] Unfortunately, he does not seem to have investigated this question as precisely as one could have wished.

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[42] Phlb.15b. Transl. Ferber.

[43] Ti. 50c. Transl. Ferber. Cf. Ferber, Theory of Ideas in *Timaeus.*

In contrast, Aristotle's position is closer to our own understanding of reality in that it recognises that universals have no separate existence, but depend on the particular. The "inexplicable" relationship between sensory phenomena and ideas now turns into the everyday predication of a universal based on a particular. This enables Aristotle to avoid Plato's separation between universals and particulars, for the universals exist in the particulars from which they are predicated. However, Aristotle, too, assumes an intellectual intuition as the precondition for perceiving the universal. Aristotle's position, then, also leads to a contradiction.

It is in fact the mirror image of Plato's. If the universal exists in the particulars, it is either individualised or a particular, and can no longer be grasped by a universal name. The quality of being human appears in Socrates, Plato, Aristotle, etc. in their individual form. But this raises the question of how an individualised universal can still be universal, that is, common to different individuals such as Socrates, Plato, Aristotle, etc., and occur in different places and times. Aristotle seems to solve the problem by arguing that universals are universal only potentially owing to our capacity for intellectual abstraction. But in so doing, he falls victim to a crucial problem of conceptualism.

According to conceptualism, genera and species exist only as thoughts or concepts in the human mind. This would make them ideas or representations. However, ideas or representations are parts of a particular soul and therefore no longer universal, but individual and subjective (cf. p. 47). And if universals are subjective, they are no longer the "shared property of many", to quote Frege.[44] Further, according to the law of existential generalisation, we assume that classes exist if we regard

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[44] Frege, Sinn and Bedeutung, 145. Transl. Geach and Black.

the proposition "The human being is a creature" as true (cf. p. 131). This implies that not only our representation of class, but the class of human beings itself, exists. Therefore, we refer by our true propositions to something outside our mind.

By saying "The human being is a creature", we mean even less that only the name "human being", as a structure of sounds or "breath", exists. As we put forward such true propositions, we think not only of something that lies outside our mind, but also of something that exists outside our linguistic utterances, that is, the class of human beings. By the proposition "The human being is a creature", we do not mean that it is the name of the class of human beings that exists, but that the class of human beings itself does. But then the universal name "human being" for the many human individuals cannot be only a "breath of our voice", as nominalism claims in an extreme statement.

Thus, neither realism, nor conceptualism, nor extreme nominalism can satisfactorily answer Porphyry's question of how genera and species exist. Realism claims too much; conceptualism and, above all, extreme nominalism claim too little.

If genera and species have only semantic existence, then universals exist neither as realities, nor as thoughts, nor as names, but only as the meanings of names. In contrast to *real* Platonism, I will call this position *semantic* Platonism. According to this position, universals exist, as in real Platonism: Being "invisible and imperceptible by any sense",[45] they are experienced objectively and differently from the sensory phenomena. However, in contrast to real Platonism, they are not "uncreated and permanent",[46] but are created by human beings. Only hu-

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[45] Ti. 52a. Transl. Ferber.
[46] Ti. 52a. Transl. Ferber.

man beings can give the universal names a meaning, which they then turn into the referent of their speech.

By saying this, I am applying Frege's remark "The indirect reference of a word is accordingly its customary sense" not only to propositions (cf. p. 152), but also to universals. We could call this the reification of the meaning of universal names. If semantic objects of this kind exist, universals, unlike sensory phenomena, have no existence that can be experienced through the senses, but only a semantic existence. Nor do they exist objectively in the strong sense of being independent from human beings, but only in the weak sense that we take their intersubjective identity for granted.

In common with Aristotle, semantic Platonism assumes that we often obtain the same intersubjective meaning by abstracting the similarities between individuals. This is most noticeable in the case of the natural species, which to some extent include human beings. Thus, we obtain the universal name "human being" by abstraction from the perceptible properties shared by the many different human individuals.

In common with conceptualism, semantic Platonism assumes that universals are made by human beings. Thus, it is a labour of intellectual abstraction that creates the shared meaning of the name "human being", which we then make the object of our speech.

In common with nominalism, semantic Platonism assumes that in reality only the particular exists, while the universal resides in the universal names. But, counter to extreme nominalism, I must stress once more that here the universal does not exist in the universal names as constructs of sounds or letters, which vary from one human being to another, but in the meanings of these names.

Semantic Platonism, then, tries to integrate elements of Platonism, Aristotelianism, conceptualism and nominalism, with-

out postulating the reality of universals or denying their inter-subjective sameness. If the meanings of universal names are made the referents, it may appear as if they are perceived directly or "seen". However, what we see, for example, in the proposition "Human beings are creatures" is not a physical human being, but only the likeness of a human being or a quasi-human. Therefore, semantic Platonism, too, is only a "quasi-Platonism" and the vision of the universals only the likeness of a vision or a "quasi-vision".

Admittedly, semantic Platonism is "difficult to accept", but also difficult "not to accept"[47], as Glaucon, Plato's brother, says about real Platonism. It is "difficult to accept", because we have no clear-cut criterion of the identity of such airy constructs as semantic objects. This was stressed particularly by Quine.[48] We can see, for example, that an individual is the same today as yesterday and, if necessary, we are able to verify that individual's identity by comparing fingerprints. But how can we tell that the invisible meaning of the universal name "human being" that we used yesterday is not something different today? We must probably be contented, in the spirit of Wittgenstein, with the fact of a successful communication over time *within* a language community, if we say, for example, "The human being is a creature."

On the other hand, semantic Platonism is "difficult not to accept", because we rely on universal semantic objects and their identity not only in the sciences, but also in our everyday communication. Aristotle aptly formulated this idea as follows: "Not to have one definite meaning is to have no meaning, and if

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[47] R 532d. Transl. Ferber.
[48] Cf. e.g. Word and Object, § 43.

words have no meaning our talking with one another, and indeed with ourselves, has been annihilated."[49]

*b)   The Being of Fictitious Things and the Being of Nothingness*

The concept of semantic existence allows me to address a further problem, namely, the problem of fictitious things – golden mountains, horses with wings, centaurs, etc. – and the problem of nothingness. Fictitious things are things that, unlike a real horse, a real mountain or a real human being, have no real existence. But fictitious things, unlike logically impossible things – for example, a round square – are logically possible. Therefore, facts that include fictitious things do not necessarily contravene the law of non-contradiction. It is no logical contradiction to say that a horse can have wings or that a cow can speak, even though in reality there are no horses with wings or talking cows. However, a square cannot be round for logical reasons. For a round square is not a square.

What, then, is the ontological status of things that are not? Fictitious things and nothingness do not exist. If we say (a) "There is no golden mountain" or (b) "There is no nothingness", we are putting forward a true proposition. But the prerequisite of a true proposition is that there should be something about which it says something true. Therefore, the corollary of the true proposition (a) is the true proposition (a'): "There is an x, which means that this x is a golden mountain." Likewise, the corollary of the true proposition (b) is the true proposition (b'): "There is an x, which means that this x is nothingness." The corollary of the negation of the existence of fictitious things and of nothingness is the affirmation of existence. This is a contra-

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[49] Metaph., Book 4, Chapter 4, 1006b7-11. Transl. Ross with slight modification by Ferber. Cf. Prm. 135b-c.

diction. Thus, the ontological status of things that are not ap-
pears contradictory: They do not exist and they exist all the
same.

The contradiction disappears if we make a distinction be-
tween real and semantic existence. The corollaries of proposi-
tions (a) and (b) are propositions (a') and (b'). But in (a) and
(b), it is not stated whether a golden mountain and nothingness
have a real or a semantic existence. Nobody has ever seen a
mountain in nature that consisted entirely of gold. Likewise,
nobody has ever literally seen nothingness (even though many
have faced nothingness in the figurative sense). Therefore,
golden mountains and nothingness do not exist really, but only
semantically, in so far as we can talk about golden mountains
and nothingness meaningfully, that is, without a logical contra-
diction. Martin Heidegger (1889-1976) thought that he could
make meaningful statements even about nothingness, for exam-
ple: "The nothing itself nihilates."[50]

The propositions (a) and (b), then, have to be rephrased as
(α) "There is no real golden mountain" and (β) "There is no real
nothingness", and (a') and (b') as (α') "There is a semantic x,
which means that this x is a golden mountain" and (β') "There
is a semantic x, which means that this x is nothingness." The
two propositions, (α) "There is no real golden mountain" and
(α') "There is a semantic golden mountain" contradict each oth-
er as little as do (β) "There is no real nothingness" and (β')
"There is a semantic nothingness."

Thus, negative existential propositions deny only the exis-
tence of a real referent in expressions such as "a golden moun-
tain" and "nothingness", but not the meaning or the semantic
referent. Rather, the meaning of the expression itself becomes

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[50] Metaphysics, Section 3, 31. Transl. Krell.

the referent. Therefore, I can again apply Frege's remark "The indirect reference of a word is accordingly its customary sense"[51] to fictitious objects where the referent is not an object in the external world, but the meaning of an expression, as in the case of the golden mountains. Since representations are private, but by a golden mountain, we mean something shared, the meaning of "golden mountain" cannot be located in our world of representation. Moreover, when we speak of a golden mountain, we do not mean our representation of a golden mountain, but a golden mountain as such. However, if the meaning of the expression becomes the referent, the meaning itself has an existence, albeit only a semantic one. We may call this process the reification of the meaning of names for fictitious things.

That is why the law of existential generalisation (cf. p. 132) does not always apply to negative existential propositions. It is necessary to indicate the context in which it does apply, whether in the real or in the semantic world. Where negative existential propositions about fictitious objects are concerned, we must modify the law of existential generalisation to ensure that the existential propositions concerned deny only real, but not semantic, existence. Thus, the proposition "There is no golden mountain" denies only the real existence of a golden mountain, but not its semantic existence. Indeed, in order to be true, it tacitly assumes the semantic existence. Since negative existential propositions about fictitious objects do not deny, but tacitly assume, their semantic existence, what follows from a negative existential proposition about fictitious objects is not their real, but their semantic, existence. That is how the distinction between real and semantic existence can solve the problem of how we are able to talk meaningfully about things that do not exist.

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[51] Frege, Sinn and Bedeutung, 145. Transl. Geach and Black.

Fictitious things, like abstract things, have no real, but only a semantic existence. Logically impossible things like round squares do not even have semantic existence since the expression "round square" does not say anything definite (cf. p. 165).

This does not mean that I need not recognise a difference between abstract and fictitious objects. While the former seem indispensable to the sciences, for example, mathematics, physics and biology, the latter – say, the gods of Homer – are creations that are accepted only within the framework of ancient mythology. Golden mountains may exist only in the fairy tale world of the Grimm brothers, or Polonius and Ophelia only in Shakespeare's *Hamlet*. In contrast to what really exists, what exists semantically is made by human beings. In addition, it is context-dependent, since it only makes sense within a framework of existential settings, be it Cantor's set theory, modern physics and biology, Greek mythology, Grimm's fairy tales or Shakespeare's *Hamlet*. The essential difference between abstract objects and fictitious ones is that the contexts in which they exist are different. But, however disparate numbers, ideal mass points, natural species, Homer's gods, golden mountains, Polonius and Ophelia may be as far as function and content are concerned – they all have only a semantic existence.

There is a sense in which real existence is also context-dependent. It depends on the context of the specific experience of human beings. But it does not depend on any one of the contexts I have mentioned within that experience. Once we have made this distinction between the context of the experience of the human species and the specific context within that experience, we can simplify matters by saying that real existence is context-independent, while semantic existence is context-dependent. Thus, our explanation of the concept of "being" answers the question "What exists, or what facts are the case?" as follows: Real and semantic facts are the case. Since real facts

can be either physical or psychic in nature, we can also say: Physical, psychic and semantic facts are the case. Such a distinction between three kinds of fact can be called – to use Popper's phrase – an ontology of three worlds.[52] The physical world is the totality of the physical facts, the psychic world is the totality of the psychic facts and the semantic world is the totality of the semantic facts.

However, a more fundamental distinction is that between two worlds, the real and the semantic. It goes without saying that the concept of being, which we assumed to be a precondition of this explanatory distinction, does not belong to the real world. For the concept of being, there is no experience, either internal or external. As Kant says, "Being is obviously not a real predicate."[53] But neither is nothingness a real predicate. The concept of nothingness, in so far as we can talk meaningfully about it, like that of being, belongs in the semantic world.

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[52] Popper, Objective Knowledge, Chapter 4, 158-197, esp. Section 4, 164-167.

[53] Kant, CPR, A 599/B 624. Transl. Guyer and Wood.

# VI. Good

## 1. The Good, Morally and Extramorally

Among all the things that exist, some stand out in our eyes by being good. But what is good? According to the classic definition, which goes back to Plato and Aristotle, the good is "that at which all things aim".[1] If all things aim at the good, all human beings do so. Therefore, we can adapt the classic definition as follows: The good is what every human being aims at.

But this definition can again be met by the question which remains open: Is what every human being aims at the good? We would answer this question in the negative. What everybody aims at is not always the good. Everybody seems to aim at pleasure. But does that make pleasure the good? We cannot answer this question in the affirmative, because obviously there are bad pleasures, for example, the pleasure of the sadist. Thus, the concept of good, too, contains a surplus meaning, which is not rendered by the classic definition. What I have said about the concept of truth and about the concept of being also applies to the concept of good: It cannot be defined explicitly, but only implicitly. To put it differently: It can only be elucidated. To explain the concept of good is to make conscious what we already know of it in an undeveloped form.

In elucidating this concept, it is again advisable to begin with language. Like the terms "true" and "is", "good" has *several* meanings, between which the classic definition – "at which all things aim" – makes no distinction. When we say "A glass of wine is good", we do not mean the same thing as when we

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[1] Aristotle, EN, Book 1, Chapter 1, 1094a2-3. Transl. Ross. Cf. Plato, Grg. 468b, 499c-500a. Cf, for more information Ferber, *Ho de diôkei*.

say "A will or an intention is good." In the first instance, we mean that a glass of wine is a good means to an end, say, for our health or enjoyment. In the second instance, we mean that a will or an intention is good in itself. In the first instance, we invest the term "good" with a relative or instrumental meaning, in the second instance, with a (comparatively) absolute or moral meaning. In what follows, I will not discuss what is good merely in an instrumental or relative sense, but what is good in itself or in a moral respect. The discipline that examines the latter is called ethics.

Ethics, according to an apt definition by George Edward Moore (1873-1958) in his *Principia Ethica* (1903), is "the general enquiry into what is good".[2] However, as we have confined ourselves to the morally good, I can narrow the definition down for our purposes as follows: Ethics is the general inquiry into what is morally good. By morality, I mean the kind of practical behaviour that corresponds to the theory of ethics.

What is morally good can be felt or told. When we tell what is good, we express ourselves in sentences that are not only descriptive but also evaluative. We judge human beings and their qualities, among other things, as good or bad, and their actions as right or wrong. Ethics, then, examines not only what is good and right, but also what is bad and wrong. What is good should be done; what is bad should be avoided. What is neither good and right nor bad and wrong, but indifferent, may be either done or avoided. That is why the language of morality contains not only evaluative sentences, but also some that command, forbid or permit something. For the language of morality, those sentences that either command or forbid something are particularly significant. They are also called normative sentences. But as

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[2] Moore, PE, Chapter 1, § 2, 2.

values are not norms, so evaluative sentences are not normative ones. The value of human life, for example, is not the same as the norm not to destroy human life. It is, rather, the foundation of this norm, which we feel in our conscience. Conscience may be considered the awareness of the normative claim of values. In a similar way, the normative sentence, the proposition "Though shalt not kill" – or more exactly its content – is founded in the evaluative proposition "Human life is valuable."

An examination of these evaluative and normative sentences is not in itself an evaluative or normative ethic. It does not tell us what is good or bad, right or wrong, to be done or not to be done. It only talks *about* the sentences we use to say that something is good or bad, right or wrong, or that we should do this and not do that. That is why this examination is also called *meta*ethics. Metaethics is the study of moral language. It includes in particular two theories of evaluative or normative statements: cognitivism and emotivism.

## 2. The Metaethics of Moral Good

### a) *Cognitivism*

The most obvious theory is cognitivism. According to this theory, moral sentences have the same status as those statements that we use to express an insight. It seems clear that we can tell as easily what is good or bad, right or wrong, as we can tell what is white and what is black. In both instances, we only need to open our eyes. That it is morally right to dress a bleeding wound, and morally wrong to let a person bleed to death, seems to be as clearly visible as the fact that snow is white and pitch is black.

This theory has several advantages. First, it agrees with our evaluative moral language. We speak in the indicative about

moral properties ("X is good or bad, right or wrong"), as well as about natural ones ("X is white or black"), and we attribute the values true or false to moral propositions as well as to assertions of facts. Further, this theory can easily explain the absolute validity that we attribute to *certain* moral values by stressing their reality and objectivity. In addition, realism in ethics and in epistemology is a basic attitude of common sense and a recurrent philosophy. It has been advocated by the majority of philosophers from Plato and Aristotle to G E Moore and others.[3] Finally, it has the advantage that, unlike ethical scepticism, which claims that we can never recognise anything as good or bad, we do not immediately abandon it – at any rate outside moral philosophy.

A particularly clear formulation of ethical realism is found in *Memoirs from the House of the Dead* by Fyodor Mikhailovich Dostoevsky (1821-1881): "There are certain crimes which, from the beginning of the world, under every code of law, have always and everywhere been regarded as indisputably crimes and will continue to be so regarded while men are men."[4] Such a crime, for example, would be the murder of a whole people, or genocide. Conversely, we can say that some deeds are undeniably morally right and will remain so as long as human beings remain human beings. Thus, it is undeniably right for one human being or one nation to save another from starvation.

Cognitivism, then, leads to moral objectivism and realism. It recognises moral facts in reality. These are objective in so far

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[3] Cf. e.g. Plato, R., Book 4, 427d-434c; Book 6, 504a-506a; Book 7, 534b-c. Transl. Jowett. Aristotle, EN, Book I, Chapter 1, 1094a, 22-26. Moore, PE, Chapter 1, §10, 9-10.

[4] Part 1, Chapter 1. Transl. Ronald Hingley and Jessie Coulson, Oxford 2008.

as they exist in themselves and not just for us, as does, for example, the fact that genocide is bad and saving people from starvation is good. The fundamental thesis of cognitivism can be formulated as follows: Moral sentences – or, more accurately, their content, the propositions – are true or false because they either agree or do not agree with moral facts.

Among these moral facts, we can distinguish two kinds: the basic and the derived. A basic or indeed "axiomatic" moral fact is conveyed by the first sentence of the Basic Law of the Federal Republic of Germany: "Human dignity is inviolable." From this "axiomatic" proposition, it is possible to "derive" others, for example, that every human being has the right to life and physical integrity, and that the freedom of the individual is uninfringeable (Article 2.1).

But how do we recognise moral facts? Obviously, moral facts cannot be real facts of a physical nature, as, for example, the fact that snow is white and pitch is black. While even such physical facts are really hypothetical, moral qualities are downright invisible to us. We can see with our own eyes that snow is white and pitch is black, but we cannot read the moral quality of a face or an action directly from the outside. A face may seem friendly to us and yet hide unfriendly thoughts behind the smile. The features of a criminal, as a rule, are no different from those of "decent" people, as any visitor to a prison can confirm. An action like the transfer of a bleeding person from one car to another may be a rescue or a kidnap.

The qualities "good", "bad", "right" or "wrong" have no effect on our sensory organs, or at least not the same effect as the qualities "white" or "black". Likewise, by just looking at Mr Smith or Mrs Jones, we cannot immediately tell that they possess inviolable dignity. As we do not perceive these moral qualities with our bodily eyes, cognitivism was able to conceive the idea that they are of a "supernatural" or metaphysical nature and

can only be "seen" with a "mind's eye". We do not see with our bodily eye that it is right to dress a bleeding wound, but wrong to let a person bleed to death, or that a human being possesses inviolable dignity. To "see" such things, we must "open our intellectual eye".

The hypothesis of direct intellectual vision is by no means restricted to "seeing" mathematical or geometrical axioms, such as "The whole is greater than the part" (cf. p. 83). Rather, it has been transferred from "seeing" mathematical and geometrical axioms to "seeing" moral ones. As we cannot see moral facts either, even though they somehow seem to exist, the linguistic expedient of talking about non-sensory vision seemed appropriate. Cognitivism thus leads to intuitionism (from *intueor*: I gaze).

Regardless of the fact that the strange "opening of the mind's eye" is a metaphorical auxiliary construction, it was precisely this intellectual intuition that supplied a decisive argument against objectivism: That intuition is an objective criterion is no truer of moral axioms than it is of the axioms of arithmetic and geometry. The intuitively plausible axiom that the whole is greater than the part, for example, is not valid for infinite quantities (cf. p. 84). Likewise, even an eye as sharp as that of Aristotle failed to "see" the inviolable dignity of the human being and the uninfringeable freedom of the individual, believing as he did that some people were slaves by nature (cf. p.107). It takes an intuition that has grown and developed historically – that is, an acquired intuition – to "see" that axiom in its universal binding force.

But even an acquired intuition may come up against borderline cases in which it no longer sees clearly. Does a person who has been in a coma for the past two years still have inviolable dignity? Moral intuition, like mathematical intuition, may offer prima facie evidence (cf. p. 86), but by no means guarantees the

impartiality claimed by the objectivist. It can be corrected or even abrogated by other "intuitions", as is, for example, the case with passive or – in the event of an incurable and unbearable illness – in certain circumstances active euthanasia.

Nor is the objectivity of this intuition alone open to doubt. There is also a possible argument against the concept of moral facts. Moral facts are not only facts, but norms. That the dignity of the human being is inviolable is a fact as well as a norm, that is, a ban on violating human dignity: If human dignity *is* inviolable, it follows that it *should* not be violated. If killing *is* morally wrong, then thou *shalt* not kill. If moral judgments are statements of facts, a constative proposition gives rise to a normative one.

Here it may be objected that it is not admissible to infer a normative proposition from a constative one. As this objection goes back to Hume's *A Treatise of Human Nature* (1739-40), it is also called "Hume's law", which states that one cannot derive an "ought" from an "is".[5] In any valid deductive conclusion, the content must not go beyond that of the premises. A valid deductive conclusion is truth-preserving (cf. p. 61). However, if a normative conclusion is inferred from constative premises, the conclusion does not preserve the truth of the premises, but goes beyond their meaning. It adds something new, which was not included in the premises, namely, an obligation.

Cognitivism and intuitionism regard evaluative and normative sentences, such as "Killing is wrong" or "Thou shalt not kill", as constative statements in linguistic disguise, which as such are true or false in so far as they agree or do not agree with moral facts. But then, according to "Hume's law", it is not possible to derive normative sentences from them. If the sentences

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[5] Hume, Treatise, Book 3, Part 1, Section 1, 469-470.

"Killing is wrong" or "Thou shalt not kill" state a fact, then "thou shalt" has no normative, but only constative, force. In that case, however, the ban on killing is not itself a ban, but the statement of a ban, and it seems that no valid norm can be derived from it. Like the derivation of an "ought" from an "is", so on the basis of "Hume's law" it seems "altogether inconceivable"[6] how moral facts could exist. A moral fact would have to imply a norm. But it is "altogether inconceivable" how a fact could imply a norm. This obliterates the decisive reason for any moral realism, objectivism and cognitivism: Where there are no moral facts in reality, there are no objective moral facts either. Where there are no objective moral facts, there is nothing that can be objectively recognised.

### b) Emotivism

As an alternative, we are offered Hume's hypothesis that moral propositions such as "X is good or bad, right or wrong" have no cognitive content and only serve to describe our feelings. If, for example, I say that premeditated murder is wrong, this proposition renders neither a natural fact of the empirical world nor a metaphysical fact of an invisible world, but merely describes my internal experience. It describes a sense of revulsion or outrage that I feel in the face of premeditated murder. Our moral language, then, leads us into a constant deception. It pretends to describe real properties, but only our emotions are real. That is why this position is called emotivism. As these feelings are described by moral propositions, we can also call this emotivism descriptive emotivism. And because emotions are normally regarded as subjective, we can also talk about a descriptive moral subjectivism.

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[6] Ibid., 469.

But here we can go one further step beyond Hume. A proposition such as "X is good or right, bad or wrong" need not have a descriptive function in spite of its descriptive form. As we have seen, there is no necessary connection between the form of a sentence and its function (cf. p. 41) ). A moral proposition such as "X is good or right, bad or wrong" need not be a description in spite of its descriptive form, but may also have an expressive purpose. According to this position, a proposition such as "Killing is wrong" is neither true nor false, because it can neither agree nor disagree with an internal or external fact. Rather, it has the same function as if "killing" were pronounced in a particularly indignant tone.[7] That is how a mother teaches her child the first moral utterances, for instance, by saying: "Lying, Ugh." This type of emotivism is also called expressive emotivism. In contrast to descriptive emotivism or subjectivism, according to the theory of expressive emotivism, moral propositions do not represent any moral facts at all – not even internal ones – but only express feelings. By so doing, they can also awaken feelings in other people and guide them to act.[8]

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[7] This view is held, for example, by Alfred Ayer (1910-1989), Language, Truth and Logic, Chapter 6: "If now I generalise my previous statement and say, 'Stealing money is wrong,' I produce a sentence which has no factual meaning – that is, expresses no proposition which can be either true or false. It is as if I had written 'Stealing money!!' – where the shape and thickness of the exclamation marks show, by a suitable convention, that a special sort of moral disapproval is the feeling which is being expressed. It is clear that there is nothing said here which can be true or false." 107.

[8] Cf. Ayer, Language, Truth and Logic: "It is worth mentioning that ethical terms do not serve only to express feeling. They are calculated also to arouse feeling, and so to stimulate action. ... In fact we may define the meaning of the various ethical words in terms both of the different feelings they are ordinarily taken to express, and also the different responses which they are calculated to provoke." 109.

However, there is a counter-argument against both kinds of emotivism or subjectivism: We can obviously pass contradictory moral judgments and disagree, with good reasons, about moral propositions as well as about assertions of facts. For example, in a debate about whether or not abortion is reprehensible, a strong case can be made for either view. If moral judgments were only descriptions or expressions of feelings, they could not be contradictory, and there would be no point in looking for reasons to argue about whether or not they are right. Feelings can conflict. A man can love and hate a woman at one and the same time, and a woman can likewise love and hate a man. But in a logical sense, feelings cannot contradict themselves, as propositions can.

With regard to morally indifferent things, for example, smoking in the street, the constative form of a sentence like "Smoking is wrong" need not necessarily have a morally relevant content. Coming from an ordinary non-smoker, it may function as a simple personal expression, but if it is said by a fanatical non-smoker, it represents for him a moral fact. It also matters, then, *who* makes the statement in question. But if a morally relevant basic proposition, such as "Genocide is morally wrong", can merely express feelings, the opposite, "Genocide is morally right", would do the same. Since both are only expressions of emotions in disguise, there would be no point in arguing, with reasons, about which is right and which is wrong.

But when it comes to moral basic propositions of the kind I have mentioned, the emotivist conception runs counter not only to our theoretical basic convictions, which we express in descriptive and objectivist language, but also to the demand for generalisation that we attach to such moral basic propositions. If we describe an action as morally wrong, we are expressing an attitude that we expect others to share. "Murder is morally wrong" means not only that "murder is morally wrong for me",

but also that "murder is morally wrong for anybody." Conversely, it would seem unacceptable to us if somebody said: "It is wrong if I secretly kill my rich aunt, but it is not wrong for me, because I will profit from her death." If it is wrong to kill my rich aunt, then it is also wrong for me.

This demand for generalisation is shown particularly clearly by the fact that moral basic propositions are socially sanctioned. If I do not observe them, I have to face a diversity of negative social sanctions, such as prison, a fine, withdrawal of social respect and other punishments. If moral basic propositions were only of a personal nature, it would be difficult to see why other people should be able to punish me for disregarding them. On the other hand, a mere expression – say, "Murder, how horrible" – is no more capable of socially sanctioned generalisation than an account of my personal feelings. Given the same facts, both the expressions and the accounts of our feelings can turn out very differently. I cannot expect other people to share my feelings. Nor can I expect my deviating expressions and emotions to be binding for other people. But neither have other people the right to punish me for my deviant feelings, or for my deviant moral expressions and emotions.

Emotivism, whether expressive or descriptive, can hardly justify the socially sanctioned demand for the generalisation of moral basic propositions, which distinguishes such basic propositions from mere exclamations and personal accounts of feelings. Nevertheless, expressive emotivism has the merit of drawing attention to the non-cognitive, expressive and action-guiding function that distinguishes moral basic propositions from merely descriptive ones. Moral basic propositions also serve to voice either commendation or condemnation, from which it is possible to derive norms as to what should be done and what should be avoided.

This gives rise to two demands that a satisfactory metaethical theory can be expected to fulfil: (a) It must take account of the cognitive and objective element in moral basic propositions and of the realistic language of morality; and (b) it must at the same time do justice to the emotive and subjective element – made up of commendation and condemnation – in moral basic propositions, so that norms can be derived from those propositions.

But the two demands seem to lead to a contradiction and to be incompatible. If moral basic propositions are cognitive and contain an objective element, they can be generalised. But then no norms can be derived from them. If moral basic propositions are emotive and contain a subjective element, it is possible to derive norms from them. But, in that case, are the moral basic propositions still able to be generalised and to be descriptive?

## c) Institutionalism

To resolve this contradiction, we may regard basic moral propositions, such as "It is right to dress a bleeding wound, but wrong to let a person bleed to death", as descriptions of *institutional* facts. Basic moral facts, then, do not exist in themselves, either in the physical world or in an invisible metaphysical world, as cognitivism suggests, nor are they merely subjective psychic facts, as descriptive emotivism assumes. But neither are they non-existent. Basic moral facts exist, but they are of an institutional nature. Accordingly, morality is neither something objective nor something subjective, but something essentially social, that is, an institution made by human beings. In so far as a moral institution, such as the ban on killing, exists regardless of whether or not I recognise it, it is not subjective, but objective. However, in so far as it is constituted by a language community, it is not objective in the strong sense of existing independently of a language community. It is objective only in an

intersubjective sense. It is valid among different people and, in the case of moral basic propositions, among all people, because it is supposed to set standards for all. (To avoid losing our way in a debate on exceptions, I will only deal with moral basic positions, such as the ban on killing in general, and ignore exceptions such as self-defence, killing in war, capital punishment, suicide, and passive or active euthanasia.)

The term "institutional fact" was introduced by J R Searle in his book *Speech Acts.*[9] Institutional facts are objective and not just a matter of feeling. Nevertheless, they cannot be reduced to real facts. Examples of such institutional facts are "Mr Smith married Miss Jones; the Dodgers beat the Giants three to two in eleven innings; Green was convicted of larceny; and Congress passed the Appropriation Bill."[10] Unlike a real – that is, merely physical or psychic – fact, an institutional fact comes into being as a result of constitutive rules. These rules are structured as follows: "X stands for Y in the context of community C." They are called constitutive because they constitute X as Y. But as they constitute X as Y in the context of the language community LC, they are also semantic rules: They give X a certain meaning Y in the context of the language community LC. A real physical action X – in the context of the language community LC – is given the meaning Y, which may be a marriage, a victory, a theft or a ratification. Institutional facts, then, are real facts, interpreted in a specific way. In institutional facts, the real world and the semantic world enter a certain association. This association, with regard to institutional facts, is of a normative nature. Therefore, Miss Jones, by marrying Mr Smith, accepts some ob-

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[9] Searle, Speech Acts, Chapter 2, Section 7, 50-53.
[10] Searle, ibid., 50-53.

ligations towards Mr Smith, as does Mr Smith towards Miss Jones by marrying her.

If we enter for Y a normative or evaluative concept – that is, the meaning of a normative or evaluative expression – such institutional facts can also contain norms or values. Among such institutional facts of a moral nature, I count the moral basic facts, for example, that it is morally right to dress a bleeding wound, but wrong to let a person bleed to death, or that genocide is morally wrong, but preventing death by starvation morally right.[11] A certain physical action (or omission) X – for example, dressing a wound or allowing a person to bleed to death, genocide or supplying food – is turned by constitutive rules into Y, that is, into a morally right or wrong one. As the physical action X represents a physical fact, we can say that physical facts are turned into institutional facts by constitutive rules.

But psychic facts, for example, Mr Smith's jealousy over Miss Jones, can also turn into institutional facts. Jealousy is generally attributed a negative value, being regarded as a "vice". Therefore, it is possible to derive from it the norm of not being jealous. Conversely, the lack of jealousy is generally attributed a positive value and regarded as a "virtue", so that it is possible to derive from it the norm of magnanimity. But since "virtues" and "vices" represent internal actions and are not immediately visible from outside, the social sanctions are also less obvious. A so-called inchoate offence, for example, the desire to kill, does not produce sanctions until it is articulated or until preparations for the action become known. Likewise, jealousy

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[11] The institutional understanding has been applied to the law by Donald Neil MacCormick and Ota Weinberger, cf. Institutional Theory, 1986, esp. Introduction, 1-30, and Chapter 2, "The Law as an Institutional Fact", 49-76. I expand the institutional understanding to metaethics. Further: Ferber, Moral Judgments, 372-392.

and magnanimity, envy and lack of envy, etc., are not assigned either a negative or a positive value until they become visible. But then internal facts or facts of consciousness also provoke external reactions from other people.

Semantic facts, too, can turn into institutional facts. By ignoring an individual murder and formulating the abstract proposition "Murder is morally wrong", we turn a semantic proposition into an institutional one. We no longer refer to an individual murder, but to the meaning of the statement "Murder is morally wrong", so that the meaning of the proposition itself becomes the referent. Likewise, the first article of the German Basic Law, "Human dignity is inviolable", is an institutional fact of a semantic nature. It does not refer to the inviolable dignity of Mr Smith or Miss Jones, but to the inviolable dignity of the human being in an abstract sense. From this institutional fact, it is possible to derive the norm that the dignity of the human being should not be violated. It is possible to do so because the proposition itself contains an in-built norm. "Human dignity is inviolable" also means: "Human dignity ought not to be violated." The word "is" in normative contexts has a normative function despite its indicative form.[12]

Thus, facts from three different worlds – the physical, the psychic and the semantic – can become institutional facts if values and norms are built into them. We can add to facts of all three kinds a normative, evaluative and institutional interpretation. If these values and norms are of a moral nature, the institutional facts become moral ones. But if basic moral facts are of an institutional nature, we can assert the existence of moral facts without contravening "Hume's law" of the impossibility of

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[12] For the normative "is", cf. Ferber, *"Normatives 'ist' und konstatives 'soll'"*, 185-199. No English translation.

deriving an "ought" from an "is". For such institutional facts contain values and norms from the outset.

On the one hand, the institutional understanding of moral facts can explain the extent to which moral facts are objective and at the same time generalisable. As facts, they are objective and valid for everybody, albeit only in the weak sense of objective, that is, as intersubjective or objective in the context of the language community LC. Today this comprises, for moral basic facts, the official language of almost all states and is codified in the Convention of Human Rights. There is almost no state and hardly an individual who would dare to claim officially that genocide or murder (with the exceptions I have mentioned) is morally permitted. The language community LC here embraces almost the entire community of human beings.

On the other hand, this interpretation can also explain the extent to which moral basic facts contain a subjective element and moral norms can be derived from them. They contain a subjective element in so far as they are made by a specific language community by means of constitutive rules; and it is possible to derive norms from them, since they contain norms from the outset. Thus, from the institutional fact that it is morally right to dress a bleeding wound, but wrong to let the person bleed to death, we can derive the norm that a bleeding wound should be dressed and the person should not be allowed to bleed to death.

The institutional understanding of moral facts also explains how far moral facts are made and sanctioned by human beings. Institutional facts are obviously made by human beings. From the outset, they contain norms that entail sanctions if they are not followed. The sanctioning is particularly noticeable where moral facts are institutionalised by law. They are backed by the state as the sole legitimate bearer of physical violence. The ban on killing, with the exceptions I have mentioned, for example, is laid down by law. Disregard of it results in a graduated range

of fixed punishments – depending on whether it is a question of murder, manslaughter, death caused by design or death caused by negligence – such as a fine, prison and, in some states, even the death penalty.

But not all institutional facts of a moral nature are legally sanctioned. Nor are all institutional facts, which are sanctioned by law, moral. For example, the law authorising the murder of mentally handicapped and sick people, brought into force by Hitler through a secret directive, was certainly not moral. At the time of National Socialism, those who perpetrated something of the kind did not find themselves in conflict with the law. But they were surely despised by most of their fellow humans and, after the fall of the Third Reich, wanted by the authorities. Some facts of a basic moral nature that are not, or are only moderately, sanctioned by the state – for example, the expectation that we should behave towards our fellow humans in a friendly and helpful way – are sanctioned by human beings by praise for friendly and helpful behaviour and censure for unfriendly and unhelpful behaviour. Here, the sanctions are not applied by the state, but they are nevertheless of a social nature, consisting in certain positive or negative responses of other people, such as praise or blame, recognition or rejection, support or obstruction.

Finally, the institutional view of moral facts shows the extent of the demands that these facts can make on me beyond the pursuit of my own interests. The demands of morality as a social institution do not always correspond to what I want. Sometimes I would rather not be "moral". Nor is morality as a social institution what God or a metaphysical or supernatural authority expects from me. To believe that, we would have to be able to assume that such an authority, or God, exists. Morality is primarily what *a* – or *the* – community of human beings demands from me. Since it is not my will, but the will of others, that is

behind morality as a social institution, it can demand that I per-
form some actions that are not in my interest, but in the interest
of others.

The institution of the ban on killing demands that I obey it
even if it were not in my interest to do so, for example, if I
could gain an advantage by killing somebody. But it is obvi-
ously in the interest of another person not to be murdered. Con-
versely, I have to dress a bleeding wound, even if the life of the
person concerned means nothing to me. But obviously it is in
the interest of the person bleeding that the wound be dressed.
The situation is similar with regard to other moral basic propo-
sitions, for example, the proposition that one should not commit
incest, steal or cheat. Therefore, we may say that the institution
of morality, at least as far as the basic demands are concerned,
is what *a* – or *the* – community of human beings expects from
me, regardless of whether or not I as an individual profit from
it. This should not be misunderstood to mean that morality for-
bids us as a matter of principle to pursue our own interests.
Rather, it means that morality restricts the pursuit of our own
interests by demanding that we also consider the interests of
others. That is why morality can make demands on me even be-
yond the pursuit of my own interests.

As a rule, our basic moral feelings are embedded in this in-
stitutional framework. They are not simply subjective, but usu-
ally well socialised; that is, they internalise the constitutive
rules and thereby the will of a language community. We are re-
pelled by a premeditated murder because that is how we were
trained to feel by our parents, teachers and fellow humans, and
because other people feel the same. If we had been socialised
three thousand, or perhaps just three hundred, years ago, many
or even most of us would be outraged by the murder of a mem-
ber of our own family, tribe or nation, but perhaps indifferent

to, or even satisfied by, the murder of a member of another family, tribe or nation.

The same applies to discrimination against people because of their race, gender, disability or sexual orientation. We regard discrimination of race, gender, disability or sexual orientation as reprehensible because that is how we were socialised and how we internalised the corresponding constitutive rules. If we had lived in another epoch, many or even most of us would have seen nothing reprehensible in slights to people of a different colour, to women, to disabled or gay people. Once a language community has fixed these institutional facts, we can apply descriptive propositions to them and in the process recognise that murder, torture or racial or gender discrimination is reprehensible, as is discrimination because of disability or sexual orientation. But even then, we do not recognise facts that exist as such, but rather institutional facts made by human beings.

As a rule, then, our basic moral feelings are not only subjective, but neither are our basic moral insights strictly objective. Rather, moral emotions and cognitions are inserted into the institutional framework of a community – a framework that is both objective and subjective. It is objective in so far as it exists intersubjectively and regardless of whether or not I recognise it. It is subjective in so far as it has come into being through constitutive rules, from which more norms can be derived. But since the institution of basic morality has largely solidified, it has the appearance of something objectively given. It is so deeply rooted that its human and social origin has been forgotten. This appearance of objectivity is in fact necessary for the moral basic rules to be universally recognised and, to a certain degree, to be actually effective.

## 3. Normative Ethics

### a) *The Concept of the Good as the Foundation of Morality*

We also, however, consider it morally better, or more correct, not to discriminate against people because of their race or gender disability or sexual orientation. And we relied even more on an intuitive understanding of what is morally right or wrong when we described dressing a bleeding wound as morally right. Just as we all somehow know the meaning of "is" and "is not", we also know the meaning of morally "good" and "bad" or "right" and "wrong". It is this unconscious knowledge that must be made conscious. Since the concept of the good also has an action-guiding function, we may hope that the answer to the question "What is morally good?" will also help us find an answer to the question "Why should we be morally good?" or "Why should we act in the morally right way?"

To obtain an answer to that question by clarifying the concept of the good, it is not enough to give a cause as to why we should act well, that is, the right way. Such a cause could be an inner trigger or motive. Such a motive could be, for example, fear or hope, in particular, hope of a reward for a good deed, or fear of punishment for a bad deed. We would, of course, prefer to be rewarded rather than punished. If we were always rewarded for moral behaviour and always punished for immoral behaviour, moral behaviour would be synonymous with what we want in our own interest. The kind of behaviour which pursues our own interests cleverly is also called wise in the sense of prudent.

Obviously, it is prudent to behave so that we are rewarded and imprudent to behave so that we are punished. Often moral behaviour is prudent, and goodness the best policy in an instrumental sense. But this is not always the case. Occasionally, moral behaviour is imprudent. At times, our goodness is the

most formidable weapon of our enemies. Often, our goodness is not rewarded but exploited and punished. Again and again, it is precisely wickedness that gets the reward. We all know that the "baddies" are sometimes rewarded and the "goodies" sometimes punished, even though we cannot put it quite like Shakespeare: "Some rise by sin and some by virtue fall."[13]

Therefore, in reply to "Why should we be good and act in the right way?" we cannot invoke a personal motive – for example, our own interest – and say: "We should be good, that is, act in the right way, because it is in our own interest." Rather, we look for a reason to be good or to act in the right way. But this reason should be independent of any concern over rewards and punishments.

Morality as a social institution is an institution with social sanctions. Otherwise it would be as good as ineffectual. But rewards and punishments do not account for the validity of morality. As much as social sanctions are the motives for our moral behaviour, as little are they the reason why we should behave morally. Beyond a certain level of social evolution, we have internalised the institution of morality so deeply that it commands us to be moral even if we are neither rewarded for moral behaviour nor punished for immoral behaviour.

Moral behaviour resembles a heavy steamer continuing its voyage long after the engines of self-interest are cut. Only then do we believe that we are acting in a truly moral way, once we have abandoned our self-interest and ceased to expect anything in return.

The definition of the good tries to give a reason why we should be moral and act morally, even without a reward. Such a reason can become an indirect cause guiding our actions. The

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[13] *Measure for Measure*, II, i, Escalus.

reason for morality becomes the cause if we adopt it and allow it to determine our actions. It is this reason that we seek in the concept of the moral good.

b)  *The Good as Utility*

Therefore, in what follows, I will take the concept of the good and the bad as my starting point, ignoring such motives as rewards and punishments. From our institutionalist position, I will restrict the question "What is morally good?" to "Which institutional facts are morally good?" To find an answer, we will first consider the consequences of the morally good and the morally bad, or evil. For this, we start with the following elucidation of Plato: "The corrupting and destroying element is the evil, and the saving and improving element the good."[14]

Here Plato does not yet distinguish between what is good in itself and what is good only as a means to an end. He believes that all that is good saves and improves, and all that is bad corrupts and destroys. Therefore, the morally good also saves and improves, while the morally bad also corrupts and destroys. To put it more simply: The morally good is *useful*, the morally bad *harmful*. It is morally wrong not to dress a bleeding wound, because that harms the person who would otherwise bleed to death. But it is morally right to dress the wound, because that benefits the bleeding person. Genocide is even more morally wrong, because it leads to the destruction of a whole nation. But supplying food is morally right, because it preserves life. Morality, then, is generally useful and life advancing, immorality harmful and life obstructing. Indeed, morality as a social institution would have found it hard to establish and consolidate itself if, in contrast to immorality, it were not beneficial, at least, for

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[14] Plato, R., Book 10, 608e. Transl. Jowett.

the life of a community, though not always for the life of each individual.

The definition "The good is life enhancing and the bad life obstructing" provides the following answer to the question of why we should be good and act in the right way: Morally right actions are useful and life enhancing; morally wrong actions are harmful and life obstructing. Therefore, the reason for morality is an extramoral value, namely, usefulness or the ability to enhance life. Accordingly, those institutional facts that are useful and life enhancing are morally right, and those that are harmful and life obstructing are morally wrong.

We do not, however, want simply to live. We want to live happily, and we do not want to live unhappily. If we were asked to describe the difference between a happy life and an unhappy life, we might answer that a happy life is full of pleasure and an unhappy life full of pain. According to this view, morality is not only life enhancing, and immorality is not only life obstructing, but morality actually leads to a happy or pleasurable life and immorality to an unhappy or painful one.

This sounds strange because the term "moral" today has acquired a secondary meaning as the enemy of pleasure. Nevertheless, it is a view that has been asserted time and again from Greek antiquity to this day. It is called "eudemonism" (from *eudaímonía*: happiness) and "hedonism" (from *hēdoné*: pleasure). An influential newer version of this theory is found in Mill's *Utilitarianism* (1863), where both eudemonism and hedonism are bracketed under the concept of "utilitarianism" (from *utilitas*: usefulness):

> The creed which accepts as the foundation of morals, Utility, or the Greatest Happiness Principle, holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. By happiness is intended

pleasure, and the absence of pain; by unhappiness, pain, and the privation of pleasure.[15]

As Mill has actions in mind, we can also talk about "act utilitarianism": A single action – for example, dressing the wound of a person about to bleed to death – is morally right if it promotes happiness or pleasure; it is wrong if it causes the opposite of happiness or pleasure, that is, unhappiness or pain. Utilitarianism can further be extended to include rules. Therefore, we can also talk about "rule utilitarianism": A rule – for example, "Thou shalt not kill" – is morally right if it generates happiness or pleasure and morally wrong if it causes misfortune or suffering.

Among these rules, we may include not only regulative moral precepts, such as "Thou shalt not kill", but also constitutive moral rules, such as "A certain action X is regarded as morally right in the context of the language community LC." Since such rules are absorbed in institutional facts, we may, within our institutionalist position, expand rule utilitarianism into institutional utilitarianism. Institutional utilitarianism, like rule utilitarianism but unlike act utilitarianism, can fall back on the moral tradition of the basic rules and institutions discussed so far, the consequences of which are to a large extent known to us from experience. This is simpler than having to consider afresh before each individual action what the consequences would be. The existing moral institutions were established in a lengthy process, and we may assume that they are not completely wrong. But that is no reason why all existing institutional facts should be morally right.

Institutional utilitarianism supplies us with a criterion for determining when institutional facts are morally right or wrong.

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[15] Mill, Utilitarianism, Chapter 2, 9-10.

Institutional facts are morally right if they generate happiness, pleasure or utility and morally wrong if they generate unhappiness, pain or harm. Thus, for example, the institutional fact that "human dignity is inviolable" is morally right, because it generates happiness, pleasure or utility, but the opposite is morally wrong, because it generates unhappiness, pain or damage. Further, the institutional fact that "magnanimity is good, envy is wrong" is morally right, as a rule, because magnanimity leads to happiness, pleasure or utility and envy to unhappiness, pain and harm – not only for the object of the envy, but also for the envious subject. As has been said, envy is the only vice that has no pleasure in it.

But utilitarianism does not claim that those actions or institutions alone are good that enhance my happiness, my pleasure and my utility. It does not claim that good is what benefits me. It also thinks of others. Nor does modern utilitarianism distinguish the different social levels. It does not say that good is what benefits my class only, and at the most, indirectly, the others. Modern utilitarianism is democratic. It believes that the good is what maximises the happiness, pleasure or utility of as many human beings as possible. In that process, according to a formula by Jeremy Bentham (1748-1832), "everybody [is] to count for one, and nobody for more than one", because everybody's basic interests are equal to everybody else's. The good then, in a catchy phrase, is what brings "the greatest possible happiness to the greatest possible number of people". The good is what maximises the happiness, pleasure or utility of the greatest possible number of people.

By this criterion, I can also explain why discrimination based on race, gender, sexual orientation or disability is morally wrong and non-discrimination right. Imagine the great pleasure food can give to a hungry person and the appalling pain experienced by somebody starving to death. We feel a similar pain if,

for example, we are rejected when looking for a job or an apartment, or if we are disadvantaged or unfairly treated in some other way because of our race, gender, sexual orientation and disability.

Institutions and institutional facts that discriminate are morally wrong also because they do not contribute to the greatest happiness, or greatest pleasure, of the greatest number and may actually cause the majority of people unhappiness or pain. Thus, the criterion of utilitarianism reveals not only when institutions are good, but also when they are fair. Fairness here means equal treatment of people of different race, gender, ability and sexual orientation. Fairness is what maximises the happiness, pleasure or utility of the majority or, in the ideal case, of all concerned. With happiness, pleasure or utility as its purpose, morality as understood by utilitarianism is built on an extramoral value.

If we ask for proof of the thesis that the good is happiness, pleasure or utility, we receive the following answer: Everybody strives for happiness, pleasure and utility. The seventeen-year-old Cécile in Françoise Sagan's (1935-2004) novel *Bonjour Tristesse* confesses candidly: "My love of pleasure seems to be the only consistent side of my character." It is because everybody strives to be happy that everybody regards happiness, pleasure and utility as good. That is why eudemonism, hedonism and utilitarianism, in both theory and practice, are recognised by everybody. Mill writes:

> If the end which the utilitarian doctrine proposes to itself were not, in theory and in practice, acknowledged to be an end, nothing could ever convince any person that it was so. No reason can be given why the general happiness is desirable, except that each person, so far as he believes it to be attainable, desires his own happiness. This, however, being a fact, we have not only all the proof which the case admits of, but all which it is possible to require, that happiness is a good: that each person's happiness is a

good to that person, and the general happiness, therefore, a good to the aggregate of all persons.[16]

"All the proof which the case admits of" is no proof at all in the strict sense. It does not prove the thesis by deriving it as a conclusion from certain premises. Rather, it confers on the thesis itself the status of a first premise of an axiomatic character: Just as it is evident that an object is visible if we actually see it, it is equally evident that we all want our own happiness, our own pleasure and our own utility. What we want we regard as good. Thus, we all regard our own happiness, our own pleasure and our own utility as good. To that extent, Mill shares the classic definition of good as "that at which all things aim". But from the axiom of utilitarianism, he draws the conclusion that the purpose of the utilitarian theory is also right in that everybody regards universal happiness as desirable, that is, as good, and that everybody desires universal happiness.

As we have seen, evidence is only a prima facie criterion for the truth of an axiom. Therefore, it is also only a prima facie argument in favour of the axiom of utilitarianism. On reflection, some objections arise. They concern both the axiom of utilitarianism and the validity of the conclusion drawn from it.

α) Let us assume that this axiom is evident and we all want our own happiness, pleasure or utility and therefore regard our own happiness, pleasure and utility as good. But it does not follow that we all also want the happiness, pleasure or utility of others and also regard the happiness, pleasure or utility of others as good. And it follows even less that we all want, or regard as good, the greatest possible happiness, pleasure and utility of the greatest possible number of other people. But if moral actions and institutions are supposed to promote "the greatest

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[16] Mill, Utilitarianism, Chapter 4, 52-53.

happiness of the greatest number", they will not only serve my happiness, but also the happiness of others. As we have seen, moral institutions can demand actions from me that go beyond my own interests. It is not immediately obvious how, by wanting my own happiness and regarding it as good, I also want and regard as good the "happiness of the greatest number".

β) The conclusion of utilitarianism may be false and its axiom, at the same time, true. The axiom that we all want – and regard as good – our own happiness, pleasure or utility seems evident. But opinions differ as to what is our own happiness, pleasure or utility. If we replaced the general terms "happiness", "pleasure" or "utility" with the concrete ideas that people mean by them, we would end up with very different things: Those dying of thirst long for a glass of water; those who are very hungry long for a slice of bread; those who are freezing long for a warm coat; those without a home long for a roof over their heads; those confined to a dark prison long for sunshine and freedom; those who are lonely long for a human companion; those surrounded by too many people long for solitude. But it is also possible to want to give pleasure to others. The axiom of utilitarianism seems so evident only because it does not say exactly what people want. If we get to the heart of the matter, it says very little or nothing.

Another way of putting it would be that we all desire something desirable. But this change of wording shows that the axiom of utilitarianism is not an empirical hypothesis that can be falsified through experience. It is a conceptual thesis that is true only on the basis of the meaning of the words used. Based on the meaning of the words "desire" and "desirable", it is true that we all desire desirable things. But as true as this axiom is, it is also trivial. And as soon as we formulate it as an empirical hypothesis, it actually becomes false. We do not desire happiness, pleasure or utility directly: We desire good things; and we

obviously desire different good things according to our needs. Only once we abstract from the individual goods, and ask ourselves what we desire to achieve through them, can we say in hindsight that we desire happiness, pleasure or utility. Therefore, the axiom of utilitarianism only seems to be directly evident. In fact, it rests on acquired evidence. But this acquired evidence can also be called into question through reflection. Seen close up, it is actually false.

γ) So we see that the consistency of the utilitarian theory does not follow from the axiom and that the axiom of the utilitarian theory is not directly evident. But even if the axiom of utilitarianism were directly evident and if the purpose of the utilitarian theory followed from it, we could ask: Is my happiness, pleasure or utility morally good? Is even the greatest possible happiness, pleasure or utility of the greatest possible number morally good?

I must answer this question in the negative, just as I already answered the question of whether everything that everybody aims at is morally good. The utilitarian definition of good – like the classic definition of good as "that at which all things aim" – does not distinguish between the morally good and the extramorally good. Even if happiness, pleasure and utility are good, this does not mean that they are morally good from the outset. This is true of both my happiness and the happiness of others. For it is also possible to aim at giving others a happiness which is regarded as immoral, for example, by aiding and abetting murder. Likewise, our own happiness is by no means always morally good – say, if it rests on the unhappiness of others.

As we have seen, the morally good is not something that we can perceive through an external experience, as we can, for example, colours or sounds. Nor is it something that we can perceive directly within us through an internal experience, as we can, for example, pleasure or pain. What is morally good is no

real predicate and has no real existence. It is determined
through constitutive semantic rules and therefore has only a se-
mantic existence. The semantic rules concerned spring from the
basic will of a community and are absorbed by the institutional
facts of that community. After the event, however, they can be
internalised by the individual. Thus, the concept of the morally
good obtains a dimension that is not exhausted by the eudemon-
istic, hedonistic and utilitarian definitions. On the other hand, it
is a mistake of eudemonism, hedonism and Mill's utilitarianism
to explain the concept of the morally good through other con-
cepts, such as happiness, pleasure or utility, which do not auto-
matically contain this moral dimension. We can call this mis-
take, with Moore, the "naturalistic", and in the language of the
previous chapter, the "realistic fallacy".[17] It consists in the im-
mediate transition from a real predicate – happiness, pleasure or
utility– to a semantic one – that of the morally good.

This "realistic" fallacy is the ontological counterpart of the
logical fallacy of inferring a normative statement from a consta-
tive one (cf. p. 179). As little as I may infer a normative state-
ment from a constative one, as little may I infer a semantic
predicate from a real one. Not only does the content of a norma-
tive statement go beyond that of a constative one, but the con-
tent of a semantic predicate also exceeds that of a real one. We
need a rule that tells us *how far* a real fact that promotes happi-
ness, pleasure or utility is morally good. In contrast, any rules
that aimed at happiness, pleasure or utility would turn the com-
paratively absolute character of moral obligation into something

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[17] Moore, PE, Chapter 1, § 10: "But far too many philosophers have
thought that when they named those other properties they were actually defin-
ing good; that these properties, in fact, were simply not 'other,' but absolutely
and entirely the same with goodness. This view I propose to call the 'natura-
listic fallacy' and of it I shall now endeavour to dispose."

relative by making it dependent on an extramoral condition, that is, the condition of the happiness, pleasure or utility of the greatest possible number. Moore was right to place Joseph Butler's dictum as a motto at the head of his *Principia Ethica*: "Everything is what it is and not another thing" (cf. p. 88). Thus, the morally good, too, is what it is and no other "thing", for example, happiness, pleasure or utility.

But even if happiness, pleasure or utility were the condition of the rightness of our moral institutions, it would be difficult to define positively what this condition may be. Happiness can mean different things to different people, so that it is not easy to compare the happiness of different people. This is all the more true if we leave it to people to decide for themselves what to see, and look for, as their happiness. Different people look for different things when they look for happiness. Often they do not really know what they are looking for. They then resemble drunks looking for their houses with the vague idea that they have one.[18] But sometimes they do not look for a house, but for a castle in the air. Happiness, to borrow a definition used by Kant in another context, is an "ideal of imagination".[19] The "greatest happiness of the greatest number" is even more an "ideal of imagination". Happiness cannot be pursued directly but completes an activity like "an end which supervenes as beauty does on those in the flower of their age."[20] Real, profound happiness, however, as far as accessible, may be, in Spengler's words, "presence without thought".

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[18] This saying is attributed to Voltaire.

[19] Kant, Groundwork, Section 2, 418. Transl. Gregor.

[20] Aristotle, NE, 1174b33. Book 10, chapter 4, Transl. Ferber.

*c)   The Good as a Rule*

Therefore, it is advisable to look for a more correct answer to the question "What is morally good?" We already used this answer in an undeveloped form, when we characterised moral basic propositions as generalisable. But utilitarianism also assumes this answer, likewise in an undeveloped form, in so far as it sees the good in "the greatest happiness of the greatest number", formulating the rule that every human being must be counted as one human being and no human being as more than one human being. And we can find this answer, again in an undeveloped form, in the Sermon on the Mount, where Jesus commands: "Therefore all things whatever ye would that men should do to you, do ye even so to them."[21]

This rule is called the *Golden Rule*. It can be phrased positively and negatively. The wording in the Sermon on the Mount is positive. The negative wording that has become established is "Don't do to others what you don't want others to do to you." The Golden Rule was developed by Kant. In his view, the morally good is not happiness, nor the "greatest happiness of the greatest number". We are told what is morally good by rules. Among the relevant rules there is a main one. It is the rule of generalisation. Kant calls it the "categorical imperative". He discusses it in many different ways in his *Groundwork of the Metaphysics of Morals* (1783), but it remains a single command:

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[21] Matthew, VII, 12. Transl. King James Bible. Cf. Luke 6, 31. In a negative wording, the Golden Rule is already found in Tobit, 4, 15 of the Old Testament: "What you hate, do not do to any one" and in Confucius, Lunyu 15, 14: "Tze-kung asked: saying, 'Is there one word which may serve as a rule of practice for all one's life?' The Master said, 'Is not reciprocity such a word? What you do not want done to yourself, do not do to others." Transl. Arthur Waley, The Analects, London 2000.

> There is therefore but one categorical imperative, namely, this: Act only on that maxim whereby thou canst at the same time will that it should become a universal law.[22]

Kant calls this imperative "categorical" because, in contrast to a hypothetical imperative, it is not relative or conditional, but absolute and unconditional. It is unconditional because it is not tied to any conditions. In particular, it is not tied to the condition of happiness, pleasure or utility. It is free of the consequences that could result for me and others from following it. We can foresee these consequences to a great extent, but not invariably. Nevertheless, we must abide by this rule and simply wait for what may come: "One must be good and expect the rest."[23]

The categorical imperative tells us that any actions are good only if they are carried out according to maxims that can be generalised. A maxim is a subjective principle. Therefore, the categorical imperative demands that we act only on those subjective principles that are generalisable. A subjective principle is generalisable if we all are able to adopt it without willing something that we cannot will. Subjective principles, which everybody is able to adopt, can be right at the intersubjective level. Therefore, the categorical imperative commands us to act only on those subjective principles that can be right at the intersubjective level.

Within our institutionalist position, we may also expand this rule of the generalisability of our actions to institutional facts: The only morally right institutional facts are those that all other people can adopt as far as possible. Thus, the criterion of gener-

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[22] Kant, Groundwork, Section 2, 491. Transl. Gregor.
[23] Kant, Observations, 19. Transl. Frierson/Guyer.

alisability, which was developed above for moral basic propositions, also becomes the reason why they are morally right.

By this criterion, we can explain why, for example, the institutional fact of dressing a bleeding wound is good, while letting a person bleed to death is bad, or saving people from starvation is good, but genocide bad. These institutional facts are clearly generalisable: I can will a law that commands us to dress a bleeding wound, but forbids us to let a person bleed to death, or a law that orders us to save people from starving to death, but forbids genocide. However, I cannot will a general law that forbids us to dress a bleeding wound, but allows us to let a person bleed to death. Even less can I will a law that forbids saving people from starvation, but permits genocide. If I willed such a law, I would implicitly will something that I cannot explicitly will. After all, I myself could one day be in danger of bleeding or starving to death, or indeed of being murdered. But generally, I can no more will to bleed or starve to death than I can will to be murdered. Given such a law, I would find myself in a conflict of my will.

By the same criterion, we can also explain why discrimination against people because of their race, gender, sexual orientation and disability is morally wrong and non-discrimination is right. Non-discrimination is right because this institutional fact is generalisable, while discrimination is not. Let us assume that there is a general law that allows discrimination against a race, gender, sexual orientation and disability. This would mean that, just as I would be allowed to discriminate against other people because of their race, gender, sexual orientation and disability, other people would be allowed to discriminate against me because of my race, gender, sexual orientation or disability. But if I willed a law that allowed me to be discriminated against, I would will something that I cannot will. I cannot will to be discriminated against.

As little as I can deny the metalogical axioms of identity and contradiction, as little can I will the "moral axioms" to be abolished. I cannot deny the metalogical axioms of identity and contradiction because, in order to deny them, I have to affirm them (cf. p. 92). But in order to abolish "moral axioms", such as the ban on killing or discrimination, I would have to will something that I cannot will. In the first instance, I would be caught up in a contradiction of my language and theoretical reason; in the second instance, in a conflict of my practical reason or, to put it differently, in a conflict of my reasonable will.

This position, which claims to be able to tell what is right and wrong on the basis of the generalisation rule, is not called utilitarian. It is called "deontological" (from *to déon*: obligation) because these commands impose an obligation on us, regardless of any useful consequences they may have. Likewise, the main command, the obligation to generalise, exists regardless of any useful consequences it may entail. In fact, there is no necessary connection between my moral or immoral behaviour and the outcome. That is why there is also no necessary connection between the concepts of morality and happiness or between the concepts of immorality and unhappiness. Moral behaviour often, but not necessarily, leads to happiness; immoral behaviour often, but not necessarily, leads to unhappiness. Happiness can be an addition to moral behaviour and "blossom unexpectedly". But it need not be so. Conversely, unhappiness can be an addition to immoral behaviour. A merit of the deontological position is that, unlike the hedonistic, eudemonistic or utilitarian positions, it sees no conceptual link between morality and happiness, but instead makes this connection dependent on the way of the world. Another merit of the deontological position is that it does not commit the "naturalistic" or "realistic fallacy". It explains the concept of the morally good not by the real conse-

quences that can be experienced internally or externally, but by a rule of our will.

However, the generalisation rule – regardless of Kant's different wordings and the metaphysical edifice of ideas in which he embedded it – is also open to serious objections. Three remarks about the generalisation rule concerning institutional facts must suffice here:

α) First, the generalisation rule, which determines what is good or bad, starts with a prior understanding of what is morally good or bad. Not every moral principle that can be generalised is morally good by definition. What if we wanted a general law that obliged everybody to get up early in the morning? Would that make getting up early a morally relevant action?

The generalisation rule alone, then, cannot give us the criterion to determine whether some institutional facts are morally right or wrong. Morally indifferent institutional facts could also be transformed into duties for everybody. To be able to serve as a criterion, the generalisation rule needs certain initial guidelines about what is prima facie morally good and what is wrong. After all, it is this rule that makes the criterion of moral institutional facts the foundation of morality.

It is a particular characteristic of these guidelines that the only actions to be institutionalised are those that have direct or indirect consequences for the vital interests of other people. Morality, as defined here, is first of all a social morality. Getting up early would be morally relevant only if the vital interests of other people were directly or indirectly affected by it. They would be affected if they suffered an undeserved disadvantage owing to my getting up late, for example, if I were a duty doctor who arrived late at the scene of an accident, violating the moral command to save life.

So it is only if we are guided by a prior understanding of which institutional facts are moral that the generalisation rule

provides a criterion as to when an institutional fact is morally right. This shows us that the generalisation rule cannot determine on its own which facts are moral, but can do so only in connection with a prior understanding of what is morally good. This involves taking the consequences of the good and the bad into account, and is basically utilitarian. Thus, getting up early is a morally relevant action if it has either useful or harmful consequences for the vital interests of other people.

β) Second, the generalisation rule assumes that, just as my actions can have either a positive or a negative effect on the vital interests of other people, the actions of others must be able to affect my vital interests, either positively or negatively. Usually, none of us is so far remote from other people as to hope or fear nothing from them. If we had nothing to hope or fear from other people, we would be able to generalise our subjective principles without a conflict of our will. Thus, the generalisation rule does not apply independently of all experience; it is only valid under specific conditions, in particular, the condition of a certain uniformity of people and their circumstances. But these conditions are such that we can regard them as largely fulfilled by most institutional facts of a moral nature. None of us is protected from others to such a degree that we could not be killed, robbed, defrauded, abused or subjected to other kinds of disadvantages.

γ) Finally, the generalisation rule does not exist in isolation from all consequences either, but it takes account of the consequences that certain institutions of a moral nature may have. The generalisation rule is predicated on the fact that I cannot want the consequences of its abolition. I cannot want an institution that allows killing without restraint, because I myself do not want to be killed. However, the generalisation rule considers not only the consequences that its abolition could have for me, but also the consequences that it could have for others. It

abstracts from my vital interests and takes account of the vital interests of all others by equating mine with theirs.

The categorical imperative, then, is in principle a hypothetical imperative that makes the vital interests of all people the condition of morality. It is a general hypothetical imperative, which could be worded as follows: Act solely on that principle which considers not only your vital interests, but those of *all* other people. And this means that as much as Mill and Kant may differ in their reasoning, they agree on the aim. Mill himself put this as follows:

> To give any meaning to Kant's principle, the sense put upon it must be, that we ought to shape our conduct by a rule which all rational beings might adopt with benefit to their collective interest.[24]

Thus, neither the prerequisites nor the aims of the utilitarian and the deontological positions are as far apart as they seem to be. Both are guided by a prior understanding of the good that takes the consequences into account. Both aim at useful consequences, not only for me, but also for all other people.

Nevertheless, the deontological explanation of morality is clearly preferable to the utilitarian, for it makes it clear that the morally good is not necessarily connected with the concept of happiness, pleasure or utility, but presupposes a specific will. The specific will, in this interpretation, is the will of a human community. Constitutive moral rules and the institutional facts corresponding to them are facts for a human community. One aspect of an institutional fact is that it applies to every member of a specific language community LC. The criterion of morality suggested here indicates only that the language community LC must not be restricted to a specific group $LC_1$, $LC_2$, $LC_3$, etc. –

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[24] Mill, Utilitarianism, Chapter 5, 78-79.

for example, rich, white, men, etc. – but should, as far as possible, include all people.

With these reservations, we can accept the generalisation rule as a rule of thumb and define it as follows: The morally right, or good, institutional facts are those that affect the vital interests of other people and that can in principle be adopted by all of us without wanting anything that we cannot want. Conversely, the morally wrong, or bad, institutional facts are those that affect the vital interests of other people and that cannot be adopted by all of us because in so doing we would have to want something that we cannot want.

Therefore metaethical institutionalism does not lead into metaethical moral relativism. Moral relativism we may define with Plato in the following way: "Whatever in any city is regarded as just and admirable, *is* just and admirable, in that city and for so long as that convention maintains itself."[25] When, for example, a city regards slavery as just and admirable, then it *is* just and admirable in this city.

Metaethical institutionalism marks with the generalisation rule the dividing line between moral and immoral institutional facts. So it is an immoral institutional fact that some human beings are treated as slaves because it cannot in principle be adopted by all of us without wanting something that we cannot want.

In this way, the proposed institutionalism tries to give also a synthesis of morality and legality. With the generalisation rule, institutionalism gives a moral foundation of legal obligations. Moral obligations which are not embedded by laws of the state or the community very often – if not always – remain inefficient. This can be observed when, as in war, laws of the state or

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[25] Tht. 167c. Transl. Levett.

the community, for example, not to steal or not to treat other people as slaves, are out of force. On the other hand, legal obligations without moral foundation are not yet moral. It is not yet a moral achievement not to steal only because the state or the community that I live in has forbidden stealing and I fear the sanctions. It becomes a moral act only when I do not steal, because I think it is right not to steal although I do not have to fear any sanctions.

The synthesis of morality and legality has been called by Hegel *Sittlichkeit* in distinction to *morality*. [26] Thus, institutionalism also tries to redefine what Hegel called Sittlichkeit, that is, customary or institutional morality in distinction to (personal) morality. Sittlichkeit is the deliberate and free acceptance and observation of the prevailing institutions of the community that I live in in so far as they are legitimated by the generalisation rule. Morality is the morality of my personal consciousness and may go beyond customary or institutional morality.

So it is a legal obligation not to steal money from my demented mother or father but to support them financially if necessary. It is a still widely accepted institutional moral obligation of Sittlichkeit to give her or him a gift at Christmas. But it is a personal moral obligation to pay them a visit every week.

The vital interests of other people can also be understood in a narrower and in a wider sense. In the narrower sense, they refer to a bare, undamaged life; in the wider sense, to a free, equal and happy one. Thus, the ban on killing, for example, is morally right because it concerns the interest of other people in bare life and because it can be adopted by all without a conflict of the will. The ban on discrimination is morally right because it

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[26] Hegel, Philosophy of Right, Part 3, § 142.

touches on other people's interest in a free and equal life and because, again, we can all adopt it without conflict.

However, the generalisation rule is only a rule of thumb because its application requires "power of judgment sharpened by experience", as Kant says about moral laws in general.[27] The power of judgment is a faculty of common sense. One of its tasks is to determine which individual cases fall under a given rule. Aristotle illustrates this by the following extramoral example:

> This is why some who do not have knowledge, and especially those who have experience, are more practical than others who have knowledge; for if a man knew that light meats are digestible and wholesome, but did not know which sorts of meat are light, he would not be promoting his health, but the man who knows that chicken is wholesome is more likely to be promoting his health.[28]

It is the power of judgment that decides which meat benefits our health or at least does not upset our digestion.

Similarly, it could be said that if we know that discrimination should be avoided, but perhaps not when a person of another colour, gender, sexual orientation or disability will feel discriminated against, we shall not achieve a great deal with this general knowledge. We are more likely to achieve something if we also know when a person of another colour or gender will feel discriminated against or hurt. Some people feel humiliated by the mere mention that they are gay, while others are proud of it.

A further task of the power of judgment is to decide how to apply the rule to the individual case. In so doing, it must follow

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[27] Kant, Groundwork, Foreword, 389. Transl. Gregor.

[28] Aristotle, EN, Book 6, Chapter 7. Transl. Ross, slightly altered by Ferber.

a principle that mediates between the two. We can call this the principle of the appropriate. It may be paraphrased in a diversity of ways. Plato, for example, who does not yet know the generalisation rule, explains this principle as " …the graceful, the opportune, the right, and all that has its seat in the middle between two extreme ends".[29] This "graceful and opportune" is not the ultimate good, that is, the idea or ideal of the good, which Plato also calls "the exact itself", that is, the standard of measure.[30] But it shows how "the exact itself" is to be realised in empirical conditions, in which a certain inaccuracy occurs.

What is morally right is essentially expressed today through the generalisation rule, even though we cannot capture the ideal of the good by following it. But the generalisation rule must also be applied with the power of judgment. That is why its use, again, leads to a certain inaccuracy. We may try to avoid the extremes of discrimination against women and disadvantaging men, but we will not always be able to avoid both at the same time. Likewise, we will apply the rule against lying with judgment. An experienced physician will sometimes withhold the whole truth from a patient without actually lying.

The poet Ingeborg Bachmann (1926-1973) wrote: "People can face the truth." But the truth can be traumatic. Therefore, we must tell it as appropriate, for example, waiting for the right moment, avoiding the extremes of deception and discouragement, and trying not to hurt any feelings.

The principle of the appropriate cannot supply a prescription for dealing with all the isolated incidents of life. Time and again, our power of judgment has to mediate afresh between the

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[29] Plt. 284e. Transl. Skemp with modifications by Ferber. For this principle, cf. Ferber, Propädeutische Lektüre des Politicus, 63-74.

[30] Plt. 284d. Transl. Ferber.

generalisation rule and the individual incidents, paying attention to the demands of the appropriate. The use of this rule allows a certain modification, so that what is appropriate in one situation need not be appropriate in another. Here, the principle of Aristotle applies: "Such things depend on particular facts, and the decision rests with the perception [of the concrete situation]."[31] The power of judgment is not actually the foundation of the right moral judgment, but when it operates appropriately, it completes that judgment.

## 4. Minimum and Maximum Morality

The generalisation rule does not explain all institutional facts of a moral nature, but only those that are necessary for a minimum or institutional morality. By "minimum morality", I mean a morality that adheres to moral basic propositions, such as those forbidding killing and discrimination. I had to take these basic propositions as my starting point because they represent, as it were, the "primal or *ur*-phenomenon" of morality.

Morality begins with the ban on killing (and incest). As a result of our profound interest in life itself, the ban on killing carries exceptional weight. Thus, many states today protect even the life of a murderer. Modern morality is aptly described by the statement that all human beings are created equal and, as human beings, have the same rights. We find this not only in the American Declaration of Independence (1776; cf. p. 107), but also in the Declaration of Human and Civil Rights (1789) of the French National Assembly: "Men are born and remain free and equal in rights. Social distinctions may be founded only upon the general good" (Article 1). If human beings are born

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[31] EN, Book 2, Chapter 9, 1109b23-24. Transl. Ross.

and remain free and equal in their rights, no human being must be discriminated against because of an accidental human characteristic, such as race, gender, disability or sexual orientation. Since we also have a profound interest in a free and equal life, the ban on discrimination has likewise been given a very wide remit.

In contrast to such a minimum morality, there is a maximum morality, which commands us to love our neighbours and even our enemies. That is the morality of the Gospel and in particular of the Sermon on the Mount.[32] The command to love our neighbours and our enemies can be generalised without embroiling us in a conflict of the will: If all people love their enemies, all my enemies also love me. This is something that I can obviously will without finding myself in a conflict of the will. But, however much we praise those who love – that is, sincerely do good to – their enemies, we do not blame those who do not love their enemy. Demands of the kind that call upon us to love our neighbours and our enemies are maximum demands. We could also call them ideals. However, as ideals, they rise above the concept of morality outlined here, although for smaller communities, for example, communities of Christians and other communities trying to live according to the demands of the Sermon on the Mount, they are binding.

Conversely, mere prudential rules, which only command us to act in our own interest, fall below the concept of morality, as I have sketched it, and belong in the field of eudemonism. Eudemonism tries to show how we can be happy or at least not unhappy. It does not prescribe, in a generally binding way, what we are to do and not to do. Rather, it gives recommendations that we may follow in order to reach a specific goal – happiness

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[32] Cf. Matthew 5.43-44, 22.38; Luke 6.27-30. Transl. King James Bible.

or well-being. Such recommendations may either keep within the bounds of morality or break them.

An example of advice keeping within the bounds of morality would be Kant's recommendation of "regimen, frugality, courtesy, reserve, etc., which experience teaches do, on the average, most promote well-being".[33] To this recommendation of an austere, aging philosopher, I would add Maxim Gorki's (1868-1936) statement: "Long live the man who knows not how to be frugal to himself."[34]

In contrast, the prudential rules of unrestrained selfishness that a leader is advised to observe by Niccolò Machiavelli (1469-1527) in *The Prince* (1532) do not obey morality: "Injuries ought to be done all at one time, so that, being tasted less, they offend less; benefits ought to be given little by little, so that the flavour of them may last longer."[35]

In our reflections, we have tried to follow a middle way between the demands of maximum morality, on the one hand, and the prudential rules of unlimited selfishness, on the other. The result is a generalisable minimum institutional morality, which only provides a few guidelines – for example, the "moral axioms" mentioned above – within which we can realise our vital interests and pursue our happiness. Nobody should do less than what is demanded by such a minimum morality. But everybody may do more.

Those who do more than is demanded by this minimum morality produce meritorious or "supererogatory" (from *superero-*

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[33] Kant, Groundwork, Section 2, 418. Transl. Gregor.

[34] From the story "The Clock", Chapter 8. Transl. Ted Crawford, The Clock, in British Socialist, August 1912, 378-384, slightly altered by Ferber.

[35] Machiavelli, Prince, Chapter 8, 271. Transl. Marriott.

*gare*: paying over the odds) works.[36] Whoever not only pays lip service to the ideals of the Sermon on the Mount, but actually lives by them, can be said to do more than is normally expected. A general practitioner who moves to a distant region to develop basic medical services for a poor population, even though he could have a higher income and a more comfortable life as a specialist in the city, performs such a praiseworthy deed. Nobody is blamed for failing to act in this way, but those who do earn special merit. The concept of good, like the concept of truth, is an ideal concept. An ideal concept is never matched completely by reality.

The Gospel rightly says: "No one is good except God alone."[37] This means that no human being, but only God, would completely fulfil this ideal concept. A human being can only try to get closer to God and the ideal concept of the good.

If the ideal concept of the good cannot be fully realised, it can even less be theoretically exhausted by our explanation of the morally good by means of the generalisation rule. Nevertheless, the generalisation rule is a minimum condition that must also be fulfilled by a maximum morality. It is a necessary, but by no means sufficient, condition for the maximum morality of loving one's neighbour and one's enemy.

Measured by minimum morality, and even more by the prudential rules of sheer selfishness, this love is unreasonable. Tolstoy's Levin, for example, says: "Reason discovered the strug-

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[36] Cf. the parable of the good Samaritan, Luke 10, 35: "And on the morrow when he departed, he took out two pence, and gave them to the host, and said unto him, Take care of him; and whatsoever thou spendest more *(quodcumque supererogaveris),* when I come again, I will repay thee." Transl. King James Bible.

[37] Mark, 10, 18; Luke 18, 19. Quoted by Kant, Groundwork, Section 2, 408: and so He says of Himself, "Why callest thou me good? none is good, save one, that is, God." Transl. King James Bible.

gle for existence, and the law that requires us to kill all who hinder the satisfaction of our desires. That is the deduction of reason. But the love of one's neighbour reason could never discover, because it́s unreasonable."[38]

Levin seems to be using the word "unreasonable" for "imprudence", and "reason" for "prudence". Reason, understood in such terms, is rather instrumental: It contents itself with finding the appropriate means to an end set by the struggle for survival. As we believe today, it does not necessarily follow from the struggle for survival that our opponents must be killed. We can just as well spare them. That is the case with stable or species-preserving evolutionary strategies, in which the opponents exercise restraint in using their deadly weapons. But as Nietzsche says in one of his lucid moments: "One has regarded life carelessly, if one has failed to see the hand that – kills with leniency."[39]

Nevertheless, Levin, representing thousands who have done more for others than is customary with minimum morality, can only find in this ideal the missing meaning of life (cf. p. 32). But this ideal can only be believed and therefore no longer doubted. Tolstoy's great novel *Anna Karenina* ends with the simple words: "But my life now, my whole life apart from anything that can happen to me, every minute of it is no longer meaningless, as it was before, but it has the positive meaning of goodness, which I have the power to put into it."[40]

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[38] Tolstoy, Anna Karenina, Part 8, Chapter 12. Transl. Constance Black Garnett with small alteration by Ferber, London 2010.

[39] Nietzsche, Beyond Good and Evil, Chapter 4, § 69, 86. Transl. Zimmern.

[40] Tolstoy, Anna Karenina, Part 8, Chapter 19. Transl. Constance Black Garnett, London 2010.

## 5. The Generalisation Rule as an Axiomatic Demand of Practical Reason

We have explained the minimum condition of the good by the conflict of our will that follows from our failure to keep to it. If an individual said: "I want to do only what benefits me", we would be able to tell him that he wants something that he will be unable to want as soon as he generalises the subjective principle of his will. For then the others could also do only what is to their advantage without taking account of his vital interests. But what if he asked us: "Why should I generalise the subjective principles of my will if I suffer no disadvantage by not generalising them?"

At this point, we can give him no further explanation. We would only be able to do so by introducing premises that cannot be supported by empirical evidence, for example, by arguing that all human beings are numerically one. Then the possible conflict between my vital interests and those of the others would have been overcome. Whatever I would do for the others, I would also do for myself. Whatever the others would do for me, they would also do for themselves. In either case, the rules of prudence would coincide with those of morality.

But the rules of morality are characterised by the fact that they do not always coincide with those of prudence. The moral demands, and in particular the generalisation rule, came into being because we are not all one and because between my will and the will of the others, there is a potential conflict. Just as we have to accept the metalogical axioms as institutions of the human language community (cf. p. 93), so we must also accept the generalisation rule as a superior axiomatic metainstitution above the institutional facts of morality. We must accept the metalogical axioms because without them we cannot talk meaningfully, and the metainstitution of the generalisation rule be-

cause we want to overcome the potential conflict between my will and that of the others.

While sceptics, in relation to the metalogical axioms, become embroiled in a contradiction of theoretical reason, in relation to the generalisation rule, they only face a discord of practical reason or the will. The difference is that a contradiction of theoretical reason is a logical contradiction, while a discord of practical reason or the will is a real conflict. This real conflict of having to will something that I do not will can occur at any time. But it usually does not occur until others will something that I do not will. Therefore, its occurrence or non-occurrence depends on empirical conditions.

Since not wanting the generalisation rule does not lead to a logical contradiction, the generalisation rule cannot be proven, like the metalogical axioms, for example, by the inconsistency of the attempt to abolish it. But neither can it be proven, like an empirical law, by claiming that, as experience teaches, moral behaviour always pays. On the contrary, honesty may be a costly thing.

Rather, the generalisation rule itself is a normative axiom for which neither logical nor empirical reasons can be given. It is an attribute of morality that it can make demands on me that go beyond the pursuit of my interests. However, an attempt to explain what goes beyond the pursuit of my interests through those same interests is predestined to fail. It leaves a gap in the argument, or a stain that cannot be erased. Thus, Mill's proof of utilitarianism by the axiom "Everybody strives for happiness, pleasure and utility" leaves a blemish in the picture of classic utilitarianism.

Kant realised that the generalisation rule, or categorical imperative – in his view "the supreme principle of morality" –

cannot be explained any further and we can only "comprehend" its "*incomprehensibility*".[41] Admittedly, we are not faced here with the "incomprehensibility" of a supernatural "fact of reason", but rather with the "incomprehensibility" of a certain form of life. It is a form of life that *wills* this rule, regardless of what stage of development it has reached.

I am tempted to call this form of life the form of life of human beings *as* human beings. If I were asked: "Why should I generalise the subjective principles of my behaviour if I incur no disadvantage by not generalising them?", I would only be able to answer: "You should still generalise the subjective principles of your behaviour." And if I were asked further: "Why should I will something for which you cannot give me a reason?", then I would only be able to answer, adapting a saying of Wittgenstein (cf. p. 53): "Here we can only describe and say: Such is moral life."

This has brought us to a provisional ending of our introduction to key concepts of philosophy. Even though we have not yet seen the sun, we have worked a small part of our way out of the cave. Let us rest here for a while before we continue to move "from here to there"[42] – perhaps to "the end of the journey".[43]

What all these concepts had in common was that we assumed them, but were unable to grasp them completely by our elucidations. That was particularly noticeable in connection with the last three concepts, truth, being and good. Their content went beyond any explicit definition. Key concepts of phi-

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[41] Kant, Groundwork, Section 3, Concluding Remark, 463. Transl. Gregor.

[42] Basic formula frequently used by Plato, Phdr. 250e. R.529a. 619c. Tht. 176a-b.

[43] Plato, R., Book 7, 532c.

losophy are the meanings of key words of philosophy. The fact that we were unable to elucidate fully the meanings of these key words shows that they cannot be exhausted by our elucidations. What we grasped through them were only aspects of these concepts, as they appeared to us because of the "weakness" of our "arguments".[44] This book was intended as a record of a small walk through philosophy and I am fully aware of its shortcomings. But the experience of philosophical inadequacy has been expressed more happily by a poet. Therefore, at the provisional end of our philosophical walk, let me return to Rilke's poem "The Walk" (written in 1924, published posthumously) and reproduce it in its entirety in plain English:

> Fixed on the sunlit hill, my gaze
> runs ahead of the road I have scarcely entered on.
> So does what we were unable to grasp
> grasp us, full of appearance, from the distance –
>
> and transform us, even if we fail to reach it,
> into what, though hardly sensing it, we are:
> a sign waves in reply to our sign ...
> But we feel only the headwind.

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[44] Plato, Ep. VII 343a.

# Bibliography

First editions and editions cited are shown below as in the German edition. They are followed by brief details of English translations existing in print. The abbreviations in square brackets are designed to save space in the Notes.

Aristotle, *Analytica posterior,a* in *Analytica priora et posteriora*, recensuit brevique adnotatione instruxit W. D. Ross, Oxford 1956 = [Analytica Posteriora]. Transl. J. Barnes, Posterior Analytics, *Posterior Analytics.* Oxford 1975, 1993[2].

Aristotle, *De anima*, recognovit brevique adnotatione critica instruxit W.D. Ross, Oxford 1956 = [De an.]. Trnasl. J. A. Smith, Oxford 1931.

Aristotle, *Categoriae et liber de Interpretatione*, recognovit brevique adnotatione critica instruxit L. Minio-Paluello, Oxford 1949 = [De int.]. Transl. John L. Ackrill, *Aristotle's Categories and De interpretation*, Oxford 1969.

Aristotle, *Ethica Nichomachea*, recognovit brevique adnotatione critica instruxit I. Bywater, Oxford 1894 = [EN]. Transl. W. D. Ross, revised with an Introduction and Notes by Lesley Brown, *Nichomachean Ethics*, Oxford 2009.

Aristotle, *Metaphysica*, recognovit brevique adnotatione critica instruxit W. Jaeger, Oxford 1957 = [Metaph.]. Transl. W. D. Ross, Metaphysics, Oxford 2009.

Aristotle, *Politica*, recognovit brevique adnotatione critica instruxit W. D. Ross, Oxford 1957 = [Pol.]. Transl. Benjamin Jowett, Politics, New York 2000.

Aristotle, *Der Protreptikos des Aristoteles*, Einleitung, Übersetzung und Kommentar von I. Düring, Frankfurt a. M. 1969. Transl. D. S. Hutchinson and Monte Ransome Johnson, Aristotle's Protrepticus, a Provisional Reconstruction. No printed version. Text accessible at www.scribd.com.

Aristotle, *Topica et Sophistici Elenchi*, recensuit brevique adnotatione critica instruxit W. D. Ross, Oxford 1958 = [Top.]. Transl. W. A. Pickard, Cambridge, Topics, in Topics, Lawrence 2006. See also *Categoriae*.

Augustine, Saint, *Confessions*, 1st ed. Strasbourg before 1470. Quoted from *Confessions, Texte établi et traduit par P. de Labriolle*, I, Paris 5th ed. 1950, II Paris 3rd ed. 1947 = [Conf.]. Transl. Henry Chadwick, Confessions, Oxford 1992.

Ayer, A. J., *Language, Truth and Logic*, London 1936, 2nd ed. 1967.

Bernays, P., *Bemerkungen zu Ludwig Wittgensteins "Bemerkungen über die Grundlagen der Mathematik,"* in *Ratio*, 1959, 3, 1-18 = [Bemerkungen]. Transl. Erich Reck, Comments on Ludwig Wittgenstein's Remarks on the foundations of mathematics (1959), Pittsburgh 1959.

Bonola, R., *Die Nichteuklidische Geometrie, Historisch-kritische Darstellung ihrer Entwicklung*, ed. H. Liebmann, Leipzig/Berlin 1919 = [Non-Euclidean Geometry]. Transl. H. C. Carslaw, Non-Euclidean Geometry, Chicago 2010.

Brentano, F., *Psychologie vom empirischen Standpunkt*, Leipzig 1874 (I), Quoted from F. Brentano, *Psychologie vom empirischen Standpunkt*, I. Ed. O. Kraus, Hamburg 1924 = [Psychology I], Transl. Antos C. Rancurello, D.B. Terrelland, Linda L. McAlister, Psychology from an Empirical Standpoint, London 1973.

Brentano, F., *Von der Klassifikation psychischer Phänomene,* in *Psychologie vom empirischen Standpunkt* (II), Leipzig 1911, Quoted from F. Brentano, *Psychologie vom empirischen Standpunkt*, II, ed. O. Kraus, Hamburg 1925 = [Psychology II]. Transl. Antos C. Rancurello, D.B. Terrelland, Linda L. McAlister, Psychology from an Empirical Standpoint, London 1973.

Burkert, W., *Platon oder Pythagoras? Zum Ursprung des Wortes 'Philosophie,'* in *Hermes* 88, 1960, 150-177.

Butler, J., *Fifteen Sermons*, London 1726. Quoted from *The Works of Joseph Butler*, ed. W. E. Gladstone, II, Sermons, etc., Oxford 1896.

Cantor, G., *Beiträge zur Begründung der transfiniten Mengenlehre*, in *Matheematische Annalen*, 46, 1895, 481-512, 49, 1897, 207-246. Quoted from G. Cantor*, Gesammelte Abhandlungen mathematischen und philosophischen Inhalts*, ed. F. Zermelo, Berlin 1932, 282-356 = [Contributions]. Transl. Philip Jourdain, Contributions to the Founding of the Theory of Transfinite Numbers, New York 1915.

Carnap, R., *Logical Foundations of Probability*, Chicago 1950.

Chisholm, R., *Person and Object*, London/La Salle 1976 = [Person and Object].

Copi, I. M., *Introduction to Logic*, New York/London 2nd ed. 1986 = [Introduction to Logic].

Descartes, R., *Meditationes de prima philosophia*, Paris 1641. Quoted from *Oeuvres de Descartes publiées par Ch. Adam & P. Tannéry, Meditationes de Prima Philosophia*, VII, Paris 1973 = [Meditations]. Transl. J. Cottingham, *Meditations on First Philosophy*, Cambridge 1996.

Descartes, R., *Principia philosophiae*, Amsterdam 1644. Transl. J. Cottingham, R. Stoothoff and D. Murdoch, *Principles of Philosophy*, in *Selected Philosophical Writings*, Cambridge 1988.

Euclid, *Elementa*, ed. J.-L. Heiberg and H. Menge, Leipzig 1883-1916 = [Elements]. Transl. D. E. Joyce, *Euclid's Elements*, Worcester MA 1996.

Ferber, R., *Das normative "ist" [das Sein Gottes und die Leibniz-Schellingsche Frage,* in *Zeitschrift für philosophische Forschung*, 42, 1988, 371-396. No English translation.

Ferber, R., *Das normative "ist" und das konstative "soll"*, in *Archiv für Rechts- und Sozialphilosophie*, 74, 1988, 185-199 [The normative 'is' and the constative 'should'] = [Normatives 'ist' und konstatives 'soll']. No English translation.

Ferber, R., *Platos Idee des Guten*, St. Augustin 1984, 2nd rev. ed. St. Augustin 1989 = [Idee des Guten]. No English translation.

Ferber, R., *Die Unwissenheit des Philosophen oder Warum hat Plato die ungeschriebene Lehre nicht geschrieben?*, St. Augustin 1991, New ed. *Warum hat Platon die ungeschriebene Lehre nicht geschrieben?*, Munich 2007. No English translation.

Ferber, R., *"Lebensform" oder "Lebensformen" – Zwei Addenda zur Kontroverse zwischen N. Garver und R.Haller* in *Akten des 15. Internationalen Wittgenstein-Symposiums*, 2, ed. K. Puhl, Vienna 1993, 270-276 = [Lebensform oder Lebensformen]. No English translation.

Ferber, R., *Moralische Urteile als Beschreibungen institutioneller Tatsachen. Unterwegs zu einer neuen Theorie moralischer Urteile*, in *Archiv für Rechts- und Sozialphilosophie*, 79, 1993, 372-392 = [Moral Judgments]. Partial English translation, *Moral Judgments as Descriptions of Institutional Facts*, in *Analyomen* 1, Berlin, New York 1994, 719-729.

Ferber, R., *Für eine propädeutische Lektüre des "Politicus"* in *Reading the Statesman, Proceedings of the III Symposium Platonicum, International Plato Studies,* 4, ed. Ch. Rowe, St Augustin 1995, 63-74 = [Propädeutische Lektüre des Politicus]. Partial English translation in: "The absolute Good and the human goods", in: Giovanni Reale and Samuel Scolnicov (eds.) 2002, *New Images of Plato: Dialogues on the Idea of the Good,* Academia Verlag, Sankt Augustin, 187-196.

Ferber, R., *Why did Plato maintain the theory of ideas in the "Timaeus"?*, in *Interpreting the Timaeus and Critias, Proceedings of the IV Symposium Platonicum, International Plato Studies 9,* ed. T. Calvo/L. Brisson, St. Augustin 1997, 179-186. Enlarged German version in *Gymnasium. Zeitschrift für Kultur der Antike und Humanistische Bildung*, 105, 1998, 419-444 = [Theory of ideas in "Timaeus"].

Ferber, R., *Die "metaphysische Perle" im "Sumpf der Tropen": Einige Bemerkungen zur aristotelischen Metaphysik, Z 17, 1041b 4-9.* In: Lazzari

A., Metamorphosen der Vernunft: Festschrift für Karen Gloy. Würzburg, 2003, 63-82 = [Metaphysische Perle]: http://www.zora.uzh.ch/34730/2.

Ferber, R., *"Ho de diôkei men hapasa psychê kai toutou heneka panta prattei"* in: *Dialogues on Plato's Politeia (Republic). Selected Papers from the Ninth Symposium Platonicum*, ed. by N. Notomi /L. Brisson*, International Plato Studies, 31, Sankt Augustin 2013, 233-241 = [Ho de diôkei]: http://www.zora.uzh.ch/77042.

Feyerabend, P., *Probleme des Empirismus, Schriften zur Theorie der Erklärung, der Quantentheorie und der Wissenschaftsgeschichte, Ausgewählte Schriften,* 2, Braunschweig/Wiesbaden 1981 = [Problems of Empiricism]. Paul K. Feyerabend, *Problems of Empiricism*, *Philosophical papers*, 2. Cambridge 1981.

Frege, G., *Begriffsschrift, eine der arithmetischen nachgebildete Formelsprache des reinen Denkens*, Halle 1879. Quoted from *Begriffsschrift und andere Aufsätze*, 2nd ed. I. Angelelli, Darmstadt 1973. Transl. S. Bauer-Mengelberg, *Concept Script*, in Jean Van Heijenoort (ed.), From Frege to Gödel, Cambridge MA 1967 = [Concept Script].

Frege, G., *Die Grundlagen der Arithmetik. Eine logisch-mathematische Untersuchung über den Begriff der Zahl*, Breslau 1884. Quoted from reprint by Wissenschaftliche Buchgesellschaft, Darmstadt 1961 of reprint Breslau 1934 = [Foundations of Arithmetic]. Transl. J. L. Austin, *The Foundations of Arithmetic: A logico-mathematical enquiry into the concept of number*, by J. L. Austin, Oxford 2nd ed. 1974.

Frege, G., *Über Sinn und Bedeutung*, in *Zeitschrift für Philosophie und philosophische Kritik*, 100, 1892, 23-50. Quoted from *Gottlob Frege: Kleine Schriften*, ed. I. Angelelli, Hildesheim 1967, 43-162 = [Sinn and Bedeutung]. Transl. P. T. Geach and M. Black, On *Sinn* and *Bedeutung*, in ed. Beaney M., The Frege Reader, Oxford 1997.

Frege, G., *Begriff und Gegenstand*, in *Vierteljahresschrift für wissenschaftliche Philosophie,* 16, 1892. Quoted from *Gottlob Frege: Kleine Scriften*, ed. I. Angelelli, Hildesheim 1967, 167-178 = [Concept and Object]. Transl. P. Geach and M. Black, Concept and Object, in ed. Beaney M., The Frege Reader, Oxford 1997. Extracts.

Frege, G., *Über die Grundlagen der Geometrie*, in *Jahresbericht der Deutschen Mathematiker-Vereinigung*, 12, 1903, 319-324. Quoted from *Gottlob Frege: Kleine Schriften*, ed. I. Angelelli, Hildesheim 1967, 262-266 = [Foundations of Geometry]. Transl. Eike-Henner W. Kluge, On the foundations of geometry: Second series, in Collected Papers on Mathematics, Logic, and Philosophy, ed. B. McGuiness, Oxford 1984.

Frege, G., *Unbekannte Briefe Freges über die Grundlagen der Geometrie und Antwortbrief Hilberts an Frege*, in *Sitzungsberichte der Heidelberger Akademie der Wissenschaften,* Mathematisch-Naturwissenschaftliche

Klasse, 2, Heidelberg 1941, 3-31. Quoted from *Gottlob Frege: Kleine Schriften*, ed. I. Angelelli, Hildesheim 1967, 400-422 = [Letters]. Hilbert's letter in P. T. Geach and M. Black, *Translations from the Philosophical Writings of Gottlob Frege*, Oxford 3rd ed. 1980.

Frege, G., *Der Gedanke. Eine logische Untersuchung,* in *Beiträge zur Philosophie des deutschen Idealismus,* I, 1918/1919, 58-77. Quoted from *Gottlob Frege: Kleine Schriften*, ed. I. Angelelli, Hildesheim 1967, 343-362 = [Thought]. Transl. P. T. Geach and R. H. Stoothoff, Thought, in ed. Beaney M., The Frege Reader, Oxford 1997, extracts 325-345.

Frege, G., *Logik*, in *Nachgelassene Schriften und Wissenschaftlicher Briefwechsel*, ed. H. Hermes et al., Hamburg 1969, 137-163 = [Logic]. Transl. P. Long and R. M. White, *Logic*, in *Posthumous Writings*, Oxford 1979, 126-151.

Frege, G., *Logik in der Mathematik*, in *Nachgelassene Schriften und Wissenschaftlicher Briefwechsel*, ed. H. Hermes et al., Hamburg 1969, 219-270, Transl. P. Long and R. M. White, *Logic in Mathematics*, in *Posthumous Writings*, Oxford 1979, 203-250 = [Logic in Mathematics].

Freud, S., *Die Traumdeutung*, Leipzig/Vienna 1900. Quoted from *Gesammelte Werke*, II/3, Frankfurt 1942 = [Interpretation of Dreams]. Transl. A. A. Brill, The Interpretation of Dreams, New York 1913.

Goodman, N., *Fact, Fiction and Forecast*, Cambridge, MA 1955.

Habermas, J., *Wahrheitstheorien* in *Wirklichkeit und Reflexion*, ed. H. Fahrenbach, Pfullingen 1972, 211-265 = [Wahrheitstheorien]. No English translation found.

Habermas, J., *Die Neue Unübersichtlichkeit. Kleine Politische Schriften*, V, Frankfurt 1983 = [New Obscurity]. Transl. Shierry Weber Nicholsen, The New Conservatism: Cultural Criticism and the Historians' Debate, Oxford 1990.

Hare, R. M., *The Language of Morals*, Oxford 1952.

Hegel, G. W. F., *Vorlesungen über die Geschichte der Philosophie*, I, Berlin 1833-1836. Quoted from new edition of *Werke,* ed. E. Moldenhauer and K. M. Michel, Frankfurt a. M. 1971, based on *Werke*, 1832-1843 = [History of Philosophy]. Transl. E S. Haldane, Lectures on the History of Philosophy v. 1, Lincoln, NE 1995.

Hegel, G.W.F., Grundlinien der Philosophie des Rechts oder Naturrecht und Staatswissenschaft im Grundrisse, Berlin 1821. Quoted from new edition of *Werke,* ed. E. Moldenhauer and K. M. Michel, Frankfurt a. M. 1971, based on *Werke*, 1832-1843 = [Philosophy of Right]. Transl. Nisbet, Cambridge 1991.

Heidegger, M., *Sein und Zeit*, Halle 1927 = [BaT]. Transl. John Macquarrie and Edward Robinson, *Being and Time*, New York 1962.

Heidegger, M., *Was ist Metaphysik*, Bonn 1929. Quoted from enlarged 6th ed. Frankfurt a. M. = [Metaphysics]. Transl. David Ferrall Krell, *What is Metaphysics*, in *Basic Writings*, London 1978.

Hilbert, D., *Grundlagen der Geometrie*, Leipzig 1899. Transl. Leo Unger, *Foundations of Geometry*, Chicago 1971.

Holenstein, E., *Sprachliche Universalien. Eine Untersuchung zur Natur des menschlichen Geistes*, Bochum 1985 = [Sprachliche Universalien]. No English translation found.

Horwich, P., *Truth*, Oxford 1990 = [Truth].

Hume, D., *A Treatise of Human Nature, Being an Attempt to Introduce the Experimental Method of Reasoning into Moral Subjects*, London 1739-40, Quoted from edition by L. A. Selby-Bigge, Oxford 1888, 2nd revised ed. P. H. Nidditch, Oxford 1978 = [Treatise].

Hume, D., *An Enquiry concerning Human Understanding*, London 1748. Quoted from *Enquiries concerning the human understanding and concerning the principles of morals by David Hume*, reprint of posthumous ed. of 1777, ed. L. A. Selby-Bigge, Oxford 1888 = [Enquiry].

James, W., *Pragmatism. A new Name for some old ways of thinking. Popular lectures on Philosophy*, London 1907 = [Pragmatism].

Kant, I., *Kritik der reinen Vernunft*, Riga 1781. Transl. Paul Guyer and Allen W. Wood, Critique of Pure Reason, Cambridge 1998 = [CPR].

Kant, I., *Prolegomena zu einer jeden künftigen Metaphysik, die als Wissenschaft wird auftreten können*, Riga 1783.

Kant, I., *Grundlegung zur Metaphysik der Sitten*, Riga 1785. Transl. Mary Gregor, Groundwork of the Metaphysic of Morals, Cambridge 1998 = [Groundwork].

Kant, I., *Anthropologie in pragmatischer Hinsicht*. Königsberg 1798 = [Anthropology]. Transl. R. B. Loudon, *Anthropology from a Pragmatic Point of View*, Cambridge 2006 = [Anthropology].

Kant, I., *Bemerkungen zu den Beobachtungen über das Gefühl des Schönen und Erhabenen*, in *Kant's Gesammelte Schriften*, ed. by .Preußische Akademie der Wissenschaften, 20, 3. Abt., Handschriftlicher Nachlaβ, 7. Band, Berlin 1942 Transl. P. Frierson, P. Guyer, *Observations on the Feeling of the Beautiful and Sublime*, Cambridge 2011 = [Observations].

Kripke, S., *Wittgenstein on Rules and Private Language. An Elementary Exposition*, London 1982 = [Wittgenstein on Rules].

Kuhn, T. S., *The Structure of Scientific Revolution*, Chicago 1962 = [Structure].

Leibniz, G. W., *Monadologie*, Jena 1720. Quoted from *Principes de la nature et de la Grace, fondées en Raison – Principes de la Philosophie ou Monadologie*, ed. A. Robinet, Paris 1954 = [Monadology]. Transl. R. Arlew

and D. Garber, *Monadology*, in *Philosophical Essays*, Indianapolis 1989, 213-224.

Lichtenberg, G. C., *Aphorismen. Schriften. Briefe*, ed. W. Promies, Munich 1974 = [Aphorisms]. Transl. R. J. Hollingdale, New York 2000.

Locke, J., *An Essay Concerning Human Understanding*, London 1960. Quoted from 5th enlarged ed., London 1706 = [Essay Concerning Human Understanding].

MacCormick, D. N./Weinberger, O., *An Institutional Theory of Law. New Approaches to Legal Positivism,* Dordrecht et al. 1986 = [Institutional Theory of Law].

Machiavelli, N., *Il Principe*, Rome 1532. Transl. W. K. Marriott, The Prince, Richmond Hill, ON 2009.

Mill, J. S., *On Liberty*, London 1859. Quoted after the second edition, London 1863.

Mill, J. S., *Utilitarianism*, London 1861/63, 15th ed. London 1907 = [Utilitarianism].

Moore, G. E., *Principia Ethica*, Cambridge 1903 = [PE].

Moore, G. E., *The Refutation of Idealism* in *Mind* 12, 1903, 433-53.

Morris, C., *Signs, Language and Behavior*, New York 1946 = [Signs, Language, Behaviour].

Nagel, T., *What is it Like to Be a Bat?* in *Philosophical Review*, 83, 1974, 435-450.

Neurath, O., *Protokollsätze*, in *Erkenntnis*, 3, 1932/33, 204-214. Transl. G. Schick, *Protocol Sentences*, in A. J. Ayer ed., *Logical Positivism*, New York 1959.

Nietzsche, F., *Also sprach Zarathustra. Ein Buch für Alle und Keinen*, Chemnitz 1883 (1. und 2. Teil), Chemnitz 1884 (3. Teil), Leipzig 1885 (4. Teil). Transl. R. J. Hollingdale, *Thus Spoke Zarathustra*, Harmondsworth 1961.

Nietzsche, F., *Jenseits von Gut und Böse. Vorspiel einer Philosophie der Zukunft*, Leipzig 1886. Quoted from *Nietzsche Werke*, ed. G. Colli and M. Montinari, VI/2, 1-255, Berlin 1968 = [Beyond Good and Evil]. Transl. Helen Zimmern, Beyond Good and Evil, Teddington 2006.

Nietzsche, F., *Zur Genealogie der Moral. Eine Streitschrift*, Leipzig 1887. Quoted from *Nietzsche Werke*, ed. G. Colli and M. Montinari, VI/2, 259-430, Berlin 1968 = [Genealogy]. Transl. W. Kaufman and R. J. Hollingdale, *On the Genealogy of Morals*, New York 1967.

Ogden, C. K./Richards, I. A., *The Meaning of Meaning. A study of the Influence of Language upon Thought and the Science of Symbolism*, London 1923 = [Meaning of Meaning].

Ortega y Gasset, Miseria y Esplendor de la Traduccion, Buenos Aires, Nacion, Mai/Juni 1937, *Obras completas,* 5, Madrid, Alianza 1983, 431-452. No English translation.

Peirce, C., *Collected Papers of Charles Sanders Peirce*, V, *Pragmatism and Pragmaticism*, Cambridge, MA 1963 = [Pragmatism and Pragmaticism].

Peirce, C. *Charles S. Peirce's Letters to Lady Welby*, ed. I.C. Lieb, New Haven 1953 = [Letters to Lady Welby].

Perry, R. B., *Review of G. E. Moore, The Refutation of Idealism* in *The Journal of Philosophy, Psychology, and Scientific Methods*, 1, 1904, 4 February.

Plato, *Apologia Sokratous* in *Platonis Opera*, I, Tetralogias I-II continens, Oxford 1901 = [Ap.].

Plato, *Charmides* in *Platonis Opera*, recognovit brevique adnotatione critica instruxit I. Burnet, III, Tetralogias V-VII continens, Oxford 1901 = [Chrm.]

Plato, *Gorgias* in *Platonis Opera*, III, Tetralogias V-VII continens, Oxford 1901 = [Grg.].

Plato, *Kratylos* in *Platonis Opera*, I, Tetralogias I-II continens, Oxford 1901 = [Cra.].

Plato, *Menon* in *Platonis Opera*, III, Tetralogias V-VII continens, Oxford 1901 = [Men.].

Plato, *Phaidon* in *Platonis Opera*, I, Tetralogias I-II continens, Oxford 1901 = [Phd.].

Plato, *Politeia* in *Platonis Opera,* IV, Tetralogiam VIII continens, Oxford 1902 = [R.].

Plato, *Phaidros* in *Platonis Opera*, I, Tetralogias I-II continens, Oxford 1901 = [Phdr.].

Plato, *Philebus* in *Platonis Opera*, II, Tetralogias I-II continens, Oxford 1901 = [Phlb.].

Plato, *Parmenides* in *Platonis Opera*, II, Tetralogias I-II continens, Oxford 1901 = [Prm.].

Plato, *Politikos* in *Platonis Opera*, Im Tetralogias I-II continens, Oxford 1901 = [Plt.].

Plato, *Theaitetos* in *Platonis Opera*, I, Tetralogias I-II continens, Oxford 1901 = [Tht.].

Plato, *Timaios* in *Platonis Opera*, IV, Tetralogiam VIII continens, Oxford 1902 = [Ti.].

Plato, *Seventh Letter* in *Platonis Opera*, V, Tertralogiam IX, definitiones et spuria continens, Oxford 1907 = [Ep. VII].

Popper, K., *Logik der Forschung*, Vienna 1934. Quoted from the 8th enlarged edition, Tübingen 1984 = [LSD]. Transl. Popper et al., *The Logic of Scientific Discovery*, London 1959.

Popper, K., *Conjectures and Refutations. The Growth of Scientific Knowledge*, London 1963. Quoted from 2002 edition = [Conjectures and Refutations].

Popper, K., *Objective Knowledge. An Evolutionary Approach*, Oxford 1972 = [Objective Knowledge].

Popper, K., *Auf der Suche nach einer besseren Welt. Vorträge und Aufsätze aus dreißig Jahren*, Munich/Zurich 1984 = [Better World]. Transl. Laura J. Bennett, *In Search of a Better World, Lectures and Essays from Thirty Years*, London 1994.

Porphyrios, *Isagoge et in Aristotelis Categorias Commentarium*, ed. A. Busse, in *Commentaria in Aristotelem Graeca*, IV, 1, Berlin 1887, 1-22. Transl. Edghill. = [Introduction].

Putnam, H., *Reason, Truth and History*, Cambridge 1981 = [Reason, Truth and History].

Putnam, H., *Reference and Understanding* in *Meaning and the Moral Sciences*, London1978, 97-122.

Quine, W. V. O., *Word and Object*, Cambridge, MA 1960 = [Word and Object].

Quine, W. V. O., *Ontological Relativity and other Essays*, New York/London 1969 = [Ontological Relativity].

Quine, W. V. O., *Pursuit of Truth*, Cambridge, MA/London 1990 = [Pursuit of Truth].

Quine, W. V. O., *From Stimulus to Science*, Cambridge, MA/London 1995 = [From Stimulus to Science].

Ramsey, F. P., *Facts and Propositions* in *Proceedings of the Aristotelian Society*, Suppl. Vol. 7, 1927, 153-170 = [Facts and Propositions].

Reichenbach, H., *The Theory of Probability. An Inquiry into the Logical and Mathematical Foundation of the Calculus of Probability*, Berkeley/Los Angeles 1949 = [Probability].

Rorty, R., Philosophy and the Mirror of Nature, Oxford 1980 = [Mirror of Nature].

Russell, B., *The Problems of Philosophy*, London et al. 1912 = [Problems].

Russell, B., See also under Whitehead, A. N.

Salmon, W. C., *Hans Reichenbach's vindication of induction* in *Erkenntnis*, 33, 1991, 99-122.

Saint-John Perse, *Allocution au Banquet Nobel du 10 décembre 1960*, in *Oeuvres complètes*, Paris 1972, 443-447. Transl. W. H. Auden, Speech of acceptance upon the award of the Nobel Prize for Literature delivered in Stockholm December 10, 1960, Bollingen 1961.

Schopenhauer, A., *Über die vierfache Wurzel des Satzes vom hinreichenden Grunde. Eine philosophische Abhandlung*, Rudolfstadt 1813. Quoted from *Arthur Schopenhauer's sämmtliche Werke*, ed. J. Frauenstädt, 2nd ed., I, Leipzig 1916 = [Fourfold Root]. Transl. Mme. K. Hillebrand, *On the Fourfold Root of the Principle of Sufficient Reason*, New York 2007.

Schopenhauer, A., *Die Welt als Wille und Vorstellung*, II, Leipzig 1844. Quoted from *Arthur Schopenhauer's sämmtliche Werke*, ed. J. Frauenstädt, 2nd ed., III, Leipzig 1916 = [W II]. Transl. R. B. Haldane and J. Kemp, The World as Will and Idea, London 1909.

Searle, J. R., *Speech Acts. An Essay in the Philosophy of Language*, Cambridge 1968 = [Speech Acts]..

Sextus Empiricus, *Adversus Mathematicos*, VII-XI, ed. H. Mutschmann, Leipzig 1914 = [M].

Spengler, O., *Der Untergang des Abendlandes. Umrisse einer Morphologie der Weltgeschichte*, Vienna 1918 (vol I) Munich 1922 (vol II). Quoted from DTV edition by A. M. Koktanek, Munich 1972. Transl. Charles Francis Atkinson, The Decline of the West, London 1932 = [DW].

Steinthal, H., Mógis *[kaum] und* exaíphnes *[plötzlich]. Platon über die Grenzen des Erkennens* in *Antike Texte in Forschung und Schule*, hg. Ch. Neumeister, Frankfurt a.M. 1993, 99-105. No English translation found.

*Stoicorum veterum fragmenta*, Coll. I. ab Arnim, 4 vol. Leipzig 1903 = [SVF]. Transl. J von Arnim, Stoicorum veterum fragmenta, New York 1986.

Tarski, A., *Der Wahrheitsbegriff in den formalisierten Sprachen*, in *Studia Philosophica*, 1, 1933, 261-405. Transl. J. H. Woodger, *The Concept of Truth in Formalised Languages* in *Logic, Semantics, Metamathematics: Papers from 1923 to 1938*, Oxford 1956.

Tarski, A., *The Semantic Conception of Truth and the Foundation of Semantics*, in *Philosophy and Phenomenological Research*, 4, 1944, 341-375 = [Semantic Conception of Truth].

Taylor, A. E., *David Hume and the Miraculous*, in *Philosophical Studies*, London 1934, 330-365 = [Hume and the Miraculous].

Watkins, J., *Science and Scepticism*, Princeton 1984 = [Science and Scepticism].

Weinberger, O., see under MacCormick, D. N.

Whitehead, A. N./Russell, B., *Principia Mathematica*, I, Cambridge et al. 1910. Quoted from 2nd ed. 1927 = [PM]..

Wittgenstein, L., *Tractatus logico-philosophicus/Logisch-Philosophische Abhandlung*, in *Annalen der Naturphilosophie* ed. W. Ostwald, 14, 1921. Quoted from L. Wittgenstein: *Schriften 1*, 9-83, Frankfurt a. M. 1969 = [TLP]. Transl. C. K. Ogden, *Tractatus logico-philosophicus*, London 1922.

Wittgenstein, L., *Philosophische Untersuchungen*, in L. Wittgenstein: *Schriften 1*, 279-544, Frankfurt a. M. 1969 = [PI]. Transl. G. E. M. Anscombe, P. M. S. Hacker and J. Schulte, *Philosophical Investigations*, 4th ed. Chichester 2009.

Wittgenstein, L., *Philosophische Grammatik, Teil 1, Satz, Sinn des Satzes, Teil 2, Über Logik und Mathematik*, ed. R. Rhees, Oxford 1969. Quoted

from L. Wittgenstein: *Schriften 4*, Frankfurt a.M. 1969 = [PG]. Transl. A. Kenny, *Philosophical Grammar*, Oxford 1974.

Wittgenstein, L., *Letzte Schriften über die Philosophie der Psychologie*, ed. G. E. M. Anscombe, London 1984 = [LW]. Transl. C. G. Luckhardt and Maximilian A. E. Aue, *Last Writings on the Philosophy of Psychology*, Oxford 1992.

Wittgenstein, L. , *Remarks on the foundations of mathematics,* ed. by G. H. v. Wright, R. Rhees, G. E. M. Anscombe, Transl. Anscombe, Oxford 1956, rev. edition1978[2] = [RFM].

Wittgenstein, L., *Bemerkungen über Frazers Golden Bough*, in *Synthese*, 17, 1967, 233-253 Transl. A. C. Miles, Remarks on Frazer's *Golden Bough,* Retford 1983 = [RFGB].

v. Wright, G. H., *The Logic of Preference. An Essay*, Edinburgh 1963 = [Logic of Preference].

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