

ФЕДЕРАЛЬНОЕ АГЕНСТВО ПО ОБРАЗОВАНИЮ

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Unit 1. Philosophy and the structure of philosophical knowledge

What is philosophy? It is a notoriously difficult question. One of the easiest ways of answering it is to say that philosophy is what philosophers do, and then point to the writings of Plato, Aristotle, Descartes, Kant, Sartre, and other famous philosophers. It is even more difficult to say what they all have in common. Another approach is to point out that philosophy is derived from the Greek word meaning 'love for wisdom'. However this is rather vague and even less helpful than saying that philosophy is what philosophers do.

Philosophy is an activity, a way of thinking about certain sorts of question. Its most distinctive feature is its use of logical argument. Philosophy teaches to think, thus not only to know, but to be able to apply this knowledge when solving everyday questions. Philosophy is a study of universal (most common) laws of nature, society and thinking.

Normally the course of philosophy is divided into the theory of philosophy and the history of philosophy. During our course we will try to think about philosophical issues ourselves and at the same time analyze what certain great figures have thought about them. The course will involve a mixture of historical and topic-based study, since if we don't know about the arguments and errors of earlier philosophers, we cannot hope to make a substantial contribution to the subject. Without some knowledge of history philosophers would never progress: they would keep making the same mistakes, unaware that they had been made before. And many philosophers develop their own theories by seeing what is wrong with the work of earlier philosophers.

One important reason for studying philosophy is that it deals with fundamental questions about the meaning of our existence. Most of us at some times in our lives ask ourselves basic philosophical questions. Why are we here? Is there any proof that God exists? Is there any purpose to any lives? What makes anything right or wrong? Could we ever be justified in breaking the law? Is mind different from body, or are we simply physical beings who only sleep and eat? How does science progress?

Most people who study philosophy believe that it is important that each of us examines such questions. Some even argue that an unexamined life is not worth living. To carry on a routine existence without ever examining the principles on which it is based maybe like driving a car which has never been serviced. You may be justified in trusting the brakes, the steering, the engine, since they have always worked well enough up until now; but you may be completely unjustified in this trust: the brake pads may fail you when you most need them. Similarly the principles on which your life is based may be entirely sound, but until you've examined them, you can't be certain of this.

Another reason for studying philosophy is that it provides a good way of learning to think more clearly about a wide range of issues. And I am perfectly sure you have already realized that to think is essential in your studies, let's say in Mathematical Analysis, Differential Equations or Probability Theory. The methods of philosophical thought can be useful in a variety of situations, since by analyzing the

arguments for and against any position we learn skills which can be transferred to other areas of life. Many people who study philosophy go on to apply their philosophical skills in jobs as diverse as the law, computer programming, management consultancy, the civil service, and journalism – all areas in which clarity of thought is a great asset.

Speaking about the history of philosophy, how did philosophy appear? The first attempts to understand the world around the man began when the man, probably in 5000 – 4000 BC, in the process of evolution started to differentiate nature as his habitat which is something different and opposed to the man. The fathers of philosophical thinking were in Ancient Egypt, Sumeria, Babylon, which can be proved by numerous, however indirect, historical monuments. Unfortunately, we do not have any written evidence of their philosophical thinking.

Ancient philosophical works, which are known to us, appeared in 2000 BC in Ancient India, Ancient China, and later in Ancient Greece. Those were mostly works of literature (myths), which described primitive ideas about the world around the man and contained attempts of its conceptualization. Philosophy reached its greatest success in Ancient Greece. The first Greek philosophers were Thales, Anaximander, Pythagoras, Xenophanes, Heraclitus (6th century BC).

In Western philosophy the following stages can be singled out: Ancient philosophy, Medieval philosophy (5 – 16th century), philosophy of Renaissance (16 – 17th century), Modern philosophy (17 – 18th century), Classical German philosophy (end of 18th – beginning of 19th century), Non-classical philosophy (19 – 20th century), Contemporary philosophy.

The first to use the term ‘philosophy’ was Pythagoras (around 500–580 BC). Originally the term ‘philosophy’ denoted striving for knowledge in general, that’s why it embraced all fields of knowledge: from life and existence to moral standards and rules. Gradually particular spheres of knowledge arose from philosophy and became sciences, so philosophy was understood as a system of views on the world and man’s relation to it.

We see that when the world changes, philosophy changes as well. Thus the study of philosophy is in fact the study of different philosophical views, which after deep analysis can form our own philosophical concepts. A *philosophical view* is a system of definite, logically connected views of this or that philosopher, e.g.: philosophical views of Plato, Aristotle, Kant, Hegel, Nietzsche etc. A philosophical view, founded by some philosopher, finds its supporters and followers, and thus a *philosophical school* is formed. A philosophical school is a combination of philosophical views, united by some basic ideological principles, e.g.: Platonism, Neo-Platonism, Marxism.

A combination of various modifications of some ideological principles, developed by different schools, and united on the basis of some common principles is called a *philosophical branch*, e.g.: idealism, materialism, rationalism, existentialism. Thus there are many different philosophical views, schools and branches, which are either alike or opposite to each other. Let’s take for instance materialism and idealism, which answer the question “Which is primary – matter or sense?” from two different angles. Or agnosticism and realism (cognitive optimism), which answer the

questions if the world can be perceived or not. What is peculiar to contemporary philosophy is that today we observe philosophical pluralism, i.e. different philosophical concepts are regarded as mutually complementative, not mutually exclusive.

The branches of philosophy can help us understand *the structure of philosophical knowledge*, as the structure of philosophical knowledge can be represented in the form of problem areas of study or the chief branches of philosophy:

- **Ontology** (part of metaphysics): Branch of philosophy concerned with providing a comprehensive account of the most general features of reality as a whole; the study of being as such. It studies such issues as the existence and nature of minds, bodies, god, space, time, causality, unity, identity, and the world are all metaphysical issues.
- **Ethics**: Branch of philosophy concerned with the evaluation of human conduct (*What is right and good?*). Philosophers commonly distinguish: (1) descriptive ethics, the factual study of the ethical standards or principles of a group or tradition; (2) normative ethics, the development of theories that systematically denominate right and wrong actions; (3) applied ethics, the use of these theories to form judgments regarding practical cases; and (4) meta-ethics, careful analysis of the meaning and justification of ethical claims.
- **Epistemology**: Branch of philosophy that investigates the possibility, origins, nature, and extent of human knowledge. It also studies the problem of truth.
- **Social Philosophy** is the study of the essence and structure of society in general, the most common laws of its existence and development, the man as a social being, the industrial and postindustrial civilizations.
- **Philosophy of History** is the study of the meaning, laws and periods of the world history, as well as the destiny of mankind.
- **Political Philosophy** is the study of government and the relationship of individuals and communities to the state, and includes questions about justice, the good, law, property, and the rights and obligations of the citizen;
- **Philosophy of Mind** deals with the nature of the mind and its relationship to the body;
- **Philosophy of Science** is the study of the peculiarities, essence, meaning of scientific knowledge, its foundations and preconditions, principles and methods, forms and aims, impact of science on man's life.
- **Logic** is concerned with the distinction between correct and incorrect reasoning. It commonly comprises both deductive and inductive arguments.

Unit 2. Mythological, religious and philosophical worldviews

The study of philosophy is closely connected with the concept of 'worldview'. **Worldview** (from German 'Weltanschauung') is a system of views on the world as a whole and an individual's attitude to this world. The subject of the worldview is an individual, or a social group, class, society. Each subject contributes something new, inimitable to the worldview thus making it unique and original. As we know there can't be two people absolutely alike in their temperament, life experience, therefore with the same world-perception.

Worldview is common experiences of a people from a geographical region, environmental-climatic conditions, the economic resources available, socio-cultural systems, and the linguistic family. However we shouldn't forget that an individual is part of the world (is in the world), and since there is no worldview without an individual, and an individual needs this view on the world to live, he/she is relatively autonomous. Thus worldview consists of two subsystems – 'individual' and 'world'. The main, central issue of any worldview is relations between individual and world.

According to the essential role they played in individual's spiritual development, the following **forms of worldview** can be singled out: mythological, everyday, religious, artistic, natural and philosophic. They all arose from individual's need in perception of the world and self-perception.

Mythological worldview was formed in the primitive society, its background being inherent thinking and feeling, striving to speculate on what is going on around. Communicative factor in families and tribes, and especially first graphic and sensible images, handed down from one generation to another in the form of pictures, sculptures etc, widened people's scope and lead to attempts to somehow explain natural phenomena.

Mythological worldview is characterized by:

- anthropomorphousness (natural phenomena are viewed by analogy with men: they have men's attributes like negative emotions, desires, suffering etc): e.g. Zeus was the sky, the earth, the air, the sea, the underworld, the bull, the wolf, the eagle, the man, and sometimes the beetle or some geometric body; Apollo was the light and dark, the life and death, the wolf and mouse and many other objects;
- descriptiveness (tendency to explain events and phenomena in the form of descriptive stories, tales, legends);
- syncretism of subjective and objective worlds: from Greek 'synkretismos' – combination, union. In other words, there is no differentiation between dream and reality, life and death, subject and object, action and ritual. E.g.: before the beginning of a military campaign in front of all the people the chief of a tribe used to break up a cup which had names of its enemies written on it, and everybody was sure that caused serious damage to those enemies. Or when after a long drought came rain showers, this was perceived as the result of appearance of a giant bird that with its black wings (=clouds) drove away the angry sky bull, whose hot breath burnt down wheat harvest. Everything is perceived as animate;

- connection with magic.

Religious form of worldview arose on the basis of convergent development of ideas about the system of gods of mythological worldview, and gradual realization of the fact that apart from subjective and natural worlds there is a supernatural world. Like mythology, religion is based on sensible images, develops ability to imagine and fantasize. But unlike mythology, religion concentrates imagination and fantasy on the supernatural, spiritual. Religion is based on personal experiences (faith). It is focused on belief in God, on achievement of true moral (godlike) values and eternity. Religion is connected not only with faith, but also with prayers and sacramentals. Religion was formed in the Old Stone Age (40-50 thousand years ago). The most widespread, or as they are also called 'world' religions are Buddhism (6-5th century BC), Christianity (1st century) and Islam (7th century). What unites them is belief in the supernatural.

Philosophical worldview arose at a more advanced level of social, economic and cultural development, showing its first characteristics in the 12-8th hundreds BC in Ancient India, Ancient China, Ancient Egypt. However the official rise of philosophical worldview as a specific form of mental activity is related to the great Cultural Revolution in Ancient Greece (8-5th centuries BC), when democracy revealed opportunities for free thinking.

One of the reasons why philosophical worldview arose was the contradiction between scientific knowledge, which was gaining power at that time and thus seeking to be autonomous in its strive to explain nature and natural phenomena, and mythological and religious worldviews. We all know that science is driven by evidence gathered in experiments, and by the falsification of extant theories and their replacement with newer, asymptotically truer, ones. Scientific knowledge led to new relations between individual and world – not only cognitive, but also theoretic.

It is worth mentioning that during a number of centuries philosophy developed together with natural sciences. Philosophers were at the same time scientists. Scientific questions were addressed as "natural philosophy". The term "science" itself meant "knowledge" of epistemological origin. The scientific method, however, made natural philosophy an empirical and experimental activity unlike the rest of philosophy, and by the end of the eighteenth century it had begun to be called "science" in order to distinguish it from philosophy.

As distinct from natural sciences, philosophy as a form of worldview generalized observations made by all sciences plus all man's experiences of perceiving the world around, including everyday observations. It united natural sciences, religious and everyday worldviews. Thus philosophy differs from science in its universal (overall) concepts and categories, its versatile or many-sided relation to reality.

Philosophy, and especially ontology and epistemology, has features of scientific knowledge: objectivity, logic, dependence on 'sufficient grounds' principle, testability in practice etc. In this respect philosophy and natural science interact. Here philosophy performs constructive function on the one hand, and natural sciences serve the source for developing philosophy (sometimes scientific concepts become philosophic, like 'system', 'element', 'structure') on the other hand. Philosophy also interacts with religion, everyday life, and art.

It is no wonder that starting from antiquity, philosophical knowledge was considered the central and highest among manifold cultural spheres. Thus, **Aristotle** (384 – 322 BC) divided philosophy into theoretical (speculative) philosophy, practical philosophy (knowing man's activities and their results), and imitative (creative) philosophy. Theoretical philosophy included metaphysics, physics and mathematics. Practical philosophy included ethics, economics and politics. And imitative philosophy comprised poetics, rhetoric and art. From his point of view, philosophy is a kind of knowledge that can be defined as “the main, dominating science, that other sciences cannot contradict”. **Francis Bacon** (1561 – 1626) wrote that different branches of science can be compared to branches on a tree that grow from one trunk, which before dividing into branches, remains one whole. So we should acknowledge one general science, which is the mother of all other sciences and in their development is like the beginning section of a trunk. He called such science “wisdom”.

Although Aristotle and Bacon lived in different eras (there's around 1500 years between them), they thought the same in general. They both considered philosophy to penetrate into all spheres of culture being its common foundation (or root). Although in Aristotle's point of view the relation of philosophy to culture is exogenous (coming from outside), in Bacon's point of view it is endogenous (coming from inside).

Unit 3. Metaphysics and ontology

Metaphysics studies principles of reality, and is concerned with explaining the fundamental nature of being and the world. The word derived from Greek words *μετά* (*meta* – ‘beyond’ or ‘after’) and *φυσικά* (*physika*).

Metaphysics is called the ‘first philosophy’ by Aristotle. The editor of his works, Andronicus of Rhodes, is thought to have placed the books on first philosophy right after another work, ‘*Physics*’, and called them τὰ μετὰ τὰ φυσικὰ βιβλία (*ta meta ta physika biblia*) or ‘the books that come after the [books on] physics’. This was misread by Latin scholiasts, who thought it meant ‘the science of what is beyond the physical’.

Aristotle’s ‘*Metaphysics*’ was divided into three parts which are now regarded as the proper branches of traditional Western metaphysics:

- **Ontology** (the study of Being and existence; includes the definition and classification of entities, physical or mental, the nature of their properties, and the nature of change);
- **Natural Theology** (the study of a God or Gods; involves many topics, including the nature of religion and the world, existence of the divine, questions about Creation, and the numerous religious or spiritual issues that concern humankind in general);
- **Universal Science** (the study of first principles, which Aristotle believed to be the foundation of all other inquiries, like causality, substance, species and elements, as well as the notions of relation, interaction, and finitude).

Traditional branches of Metaphysics are Cosmology and Ontology. **Cosmology** is the branch of metaphysics that deals with the world as the totality of all phenomena in space and time. It addresses questions such as:

- What is the origin of the Universe? What is its first cause? Is its existence necessary? (see monism, pantheism, emanationism and creationism)
- What are the ultimate material components of the Universe? (see mechanism, dynamism, atomism)
- What is the ultimate reason for the existence of the Universe? Does the cosmos have a purpose? (see teleology)

Ontology (from the Greek ὄν, genitive ὄντος; *of being* <neuter participle of εἶναι: *to be*> and -λογία: *science, study, theory*) studies the nature of being, existence or reality in general, as well as the basic categories of being and their relations. In other words, Ontology studies what types of things there are in the world and what relations these things bear to one another.

Ontology deals with questions concerning what entities exist or can be said to exist, and how such entities can be grouped, related within a hierarchy, and subdivided according to similarities and differences.

The principal questions of ontology are:

- What is existence?
- What can be said to exist?
- Is existence a property?
- Which entities are fundamental?

- What is a physical object?
- What constitutes the identity of an object?
- Into what categories, if any, can we sort existing things?

Ontology also studies such notions as existence, objecthood, property, space, time, causality and possibility.

Now let's try to think what is understood by being/existence. What is the content of the category? Look at the following statements.

- 1) The world around us, objects, phenomena really exist, i.e. the world (it) is.
- 2) The world is constantly developing; it has an inherent cause, the source of dynamics in itself.

These two statements have one thing in common – the category of substance, which is an independent essence that does not need anything for its existence but itself. Thus, **being** is a really existing, stable, independent, eternal, infinite substance, which comprises everything that exists.

The basic ontological categories are:

- **Entities** (*Bill, Betty*). An entity is an existing or real thing. The word root is from the Latin 'ens' or being. An entity exists and that's all it needs to do to be an entity.

The world seems to contain many individual things, both physical, like apples, and abstract such as love and the number 3; the former objects are called particulars. Particulars are said to have attributes, e.g. size, shape, colour, location and two particulars may have some such attributes in common. Such attributes, are also termed 'properties'.

Let's take a closer look at one more thing that is of great interest in philosophy concerning entities. Knives and forks are objects external to us. They have an objective existence. Presumably, they will be there even if no one watches or uses them ever again. We can safely call them "*objective* entities".

Our emotions and thoughts can be communicated; however they are not either communication itself or its contents. They are "*subjective* entities", internal, dependent upon our existence as observers.

But what about numbers? The number one, for instance, has no objective, observer-independent status. We are not referring to the number one as adjective, as in "one apple". We are referring to it as a stand-alone entity. As an entity it seems to stand alone in some way (it's out there), yet be subjective in other ways (dependent upon observers). Numbers belong to a third category, which can be called "*bestowed* entities". These are entities whose existence is bestowed upon them by social agreement between conscious agents.

But this definition is so wide that it might well be useless. Religion and money are two examples of entities which owe their existence to a social agreement between conscious entities, yet they don't strike us as universal and out there (objective) as numbers do.

Thus we must distinguish "social entities" (like money or religion) from "bestowed entities". Social Entities are not universal, they are dependent on the society, culture and period that gave them birth. In contrast, numbers are Platonic

ideas which come into existence through an act of conscious agreement between all the agents capable of reaching such an accord. While conscious agents can argue about the value of money (i.e., about its attributes) and about the existence of God, no rational, conscious agent can have an argument regarding the number one.

Numbers are acknowledged to have an independent, universal quality. Their existence does depend on intelligent observers in agreement. But they exist as potentialities, as Platonic ideas, as tendencies. They materialize through the agreement of intelligent agents rather the same way that ectoplasm was supposed to have materialized through spiritualist mediums. The agreement of the group is the channel through which numbers (and other bestowed entities, such as the laws of physics) are materialized, come into being.

Now as we have exhaustively analyzed the notion of 'entities' and the groups of entities, we can go on with other basic categories of ontology. Among them are:

- **Properties** (e.g., strong).
- **Relations** (e.g., kinder than). This category denotes a logical or natural association between two or more things; relevance of one to another; connection.
- **Processes** (e.g., runs). Processes are a series of actions, changes, or functions bringing about a result.
- **States** (e.g., Bill is strong). Under this category we mean a condition of being in a stage or form, as of structure, growth, or development.
- **Events** (e.g., Betty jumped). An event is something that takes place/happens; an occurrence.
- **Courses of events** (e.g., Betty went to town).

What are the forms of being/existence?

- ✓ *Material existence* (existence of material objects, natural phenomena that have such qualities as dimension, weight, volume, density etc.)
- ✓ *Ideal existence* (existence of the ideal as an independent reality in form of individualized spiritual existence and objectivistic (non-individual) spiritual existence)
- ✓ *Human existence* – existence of a human being as the unity of material and spiritual (ideal), existence of a human being as he/she is and their existence in the material world
- ✓ *Social existence* – includes existence of a human being in the society and existence (life, development) of the society itself
- ✓ *Noumenal existence* ('noumen' – thing in itself) – being which really exists, no matter who it is observed by
- ✓ *Phenomenal existence* – being which seems, i.e. being as seen by the observer.

But as seen from practice, the two last existences – noumenal and phenomenal – as a rule coincide.

The category opposite to existence/being is non-existence / nonbeing. This is a total absence of anything, absolute nothing, e.g.: people who are not born yet; societies/states that used to exist and then died, disappeared, so they do not exist.

Unit 4. Monism, dualism and pluralism.

Idealism and materialism

Depending on how many basic categories of reality there are, we single out monism, dualism and pluralism. In other words, if there is only one basic category of reality, we are talking about monism; if there are two – then dualism, and in case there are many – then we are dealing with pluralism.

Monism is any philosophical view which holds that only things of a single kind exist. Thus, some philosophers may hold that the Universe is really just one thing, despite its many appearances and diversities; or theology may support the view that there is one God, with many manifestations in different religions.

Monism in philosophy can be defined according to the following kinds:

- Idealism, phenomenalism, or mentalistic monism which holds that only mind is real.
- Physicalism or materialism, which holds that only the physical is real, and that the mental can be reduced to the physical.
- Neutral monism, which holds that both the mental and the physical can be reduced to some sort of third substance, or energy.

The first known metaphysician, according to Aristotle, was **Thales**. His concept of *Arche* or the source, first principle, or substratum was that of moisture, which is frequently translated as ‘water’.

Other Miletians, such as Anaximander and Anaximene, also had a monistic conception of *Arche*. **Anaximander**: Apeiron (meaning ‘the undefined infinite’). Reality is some, one thing, but we cannot know what. **Anaximene**: Air. **Heraclitus**: Fire (in that everything is in constant flux).

Parmenides of Elea was among the first to propose an ontological characterization of the fundamental nature of reality. He held that the multiplicity of existing things, their changing forms and motion, are but an appearance of a single eternal reality (“Being”), thus giving rise to the Parmenidean principle that “all is one”. Existence is what exists, and there is nothing that does not exist. Hence, there can be neither void nor vacuum; and true reality can neither come into being nor vanish from existence. Rather, the entirety of creation is limitless, eternal, uniform, and immutable. Reality is an unmoving perfect sphere, unchanging, undivided. Parmenides thus posits that change, as perceived in everyday experience, is illusory. From this concept of Being, he went on to say that all claims of change or of non-Being are illogical. Change is impossible, and therefore existence is eternal.

Neopythagorians such as Apollonius of Tyana centered their cosmologies on the Monad or One.

Dualism denotes a state of two parts. The word’s origin is the Latin *duo*, ‘two’. The term ‘dualism’ was originally coined to denote co-eternal binary opposition. For instance, in western religions there is a conflict between good and evil. Some other examples of such oppositions are: yin and yang in the Taoist religion, male and female, light and dark, active and passive, motion and stillness.

In philosophy of science, *dualism* often refers to the dichotomy between the “subject” (the observer) and the “object” (the observed). In politics, dualism refers to

the separation between the legislature and executive power, which keeps a balance between the two, ensuring government doesn't go against the will of the people's representatives. In philosophy of mind, dualism is a view about the relationship between mind and matter, which claims that mind and matter are two ontologically separate categories.

The opposition of materialism and idealism is revealed in the so-called *mind-body problem (dichotomy)*. The mind-body problem, i.e. the relationship of the mind to the body, is commonly seen as the central issue in philosophy of mind. That is the difficulty of explaining how the mental activities of human beings relate to their living physical organisms. The main aim of philosophers working in this area is to determine the nature of the mind and mental states/processes, and how – or even if – minds are affected by and can affect the body.

In other words, materialism is belief that only physical things truly exist. Materialists claim (or promise) to explain every apparent instance of a mental phenomenon as a feature of some physical object. Materialists acknowledge existence of material objects (matter – i.e. whatever has size and shape, is solid and tangible, takes up space, and can move).

In contrast, in idealism the material is sweepingly eliminated in favour of the mental. Idealism is belief that only mental entities are real, so that physical things exist in the sense that they are perceived. Idealists, such as George Berkeley, Fichte, Hegel and Schopenhauer, claim that material objects do not exist unless perceived and only as perceptions. Idealists deny existence of matter.

The mental and the physical seem to have quite different, and perhaps irreconcilable, properties. Mental events have a certain subjective quality to them, whereas physical events do not. So, for example, one can reasonably ask what a burnt finger feels like, or what a blue sky looks like, or what nice music sounds like to a person. But it is meaningless, or at least odd, to ask what a surge in the uptake of glutamate in the dorsolateral portion of the hippocampus feels like.

Pluralism is usually opposed to monism and dualism. The concept of pluralism in philosophy indicates that reality consists of many different substances. Reality ultimately includes many different kinds of things. Thus, in ethics, the supposition that there are many independent sources of value and, in political life, acceptance of a multiplicity of groups with competing interests.

To analyze the concept we'd better take a deeper look at Plato's and Aristotle's philosophy.

Plato developed this distinction between true reality and illusion, in arguing that what is real are eternal and unchanging Forms or Ideas (a precursor to universals), of which things experienced in sensation are at best merely copies, and real only in so far as they copy ('participate in') such Forms. In general, Plato presumes that all nouns (e.g., 'Beauty') refer to real entities, whether sensible bodies or insensible Forms. Hence, in 'The Sophist' Plato argues that Being is a Form in which all existent things participate and which they have in common (though it is unclear whether 'Being' is intended in the sense of existence, copula, or identity); and argues, against Parmenides, that Forms must exist not only of Being, but also of Negation and of non-Being (or Difference).

Ontology as an explicit discipline was inaugurated by Aristotle, in his *Metaphysics*, as the study of that which is common to all things which exist, and of the categorisation of the diverse senses in which things can and do exist. What exists, in so far as Aristotle concludes, are a plurality of independently existing substances – roughly, physical objects – on which the existence of other things, such as qualities or relations, may depend; and of which substances consist both of a form (e.g. a shape, pattern, or organisation), and of a matter formed (Hylomorphism). Against Plato, who taught frameworks or the theory of forms, Aristotle holds that universals, these do not have an existence over and above the particular things which instantiate them.

We have distinguished between monism, dualism and pluralism, and have also discussed the difference between idealism and materialism. Yet, the notion ‘matter’ needs to be analysed in terms of its specific features.

First of all, under the term ‘*matter*’ we understand everything that has size and shape, that is solid and tangible, that takes up space, and can move – in other words, it is what we call material objects. The specific features of matter are:

- motion (it can move);
- self-organization;
- arrangement in space and time;
- ability to reflect (reflection).

(1) **Motion** starts in matter itself, out of inherent opposites. Motion is all-encompassing, everything moves: starting atoms, microparticles, living organisms, chemical elements, rivers, societies, the Earth, stars, galaxies. Motion is continuous, it exists always. When some forms of motion stop, other new forms appear.

Motion can be of two types: *quantitative* (when matter and energy are transferred in space), and *qualitative* (matter changes, new material objects and qualities appear).

(2) **Self-organization** is ability to create, improve and reproduce itself without any external forces. Self-organization is based on accidental vibrations and deviations – the so-called *fluctuations*.

(3) Matter is arranged in space and time. **Time** is temporal duration, it expresses how long material objects exist and how states change. **Space** characterizes extension, the structure of matter, also interaction of elements inside material objects as well as interaction of material objects themselves.

Space and time are interconnected. What is in space, is also happening in time. And what is happening in time, is also in space.

(4) **Reflection** is an ability of material objects to reproduce in themselves qualities of other material objects. And the material proof of reflection is the presence of marks of one material object on another. Most common examples are footprints, scratches, echo, reflection in a mirror.

The highest level of reflection is *sense*.

Unit 5. Determinism, indeterminism and compatibilism

Depending on the kind of principles governing the world (connecting phenomena with each other), three philosophical views are distinguished: Determinism, Indeterminism and Compatibilism.

Determinism is a philosophical view that considers all events, including human cognition, decisions and actions are causally determined by an unbroken chain of prior occurrences. Among the philosophers supporting this view are: Baruch Spinoza, Gottfried Leibniz, Baron d’Holbach (Paul Heinrich Dietrich), Pierre-Simon Laplace, Arthur Schopenhauer, Friedrich Nietzsche, Albert Einstein.

It is a belief that, since each momentary state of the world entails all of its future states, it must be possible (in principle) to offer a causal explanation for everything that happens. Determinism holds that no random, spontaneous, mysterious or miraculous events occur. All current and future events are causally necessitated by past events combined with the laws of nature.

This can be illustrated by the thought experiment of Laplace. Imagine an entity that knows all facts about the past and the present, and knows all natural laws that govern the universe. Such an entity may be able to use this knowledge to foresee the future, down to the smallest detail.

“We ought to regard the present state of the universe as the effect of its antecedent state and as the cause of the state that is to follow. An intelligence knowing all the forces acting in nature at a given instant, as well as the momentary positions of all things in the universe, would be able to comprehend in one single formula the motions of the largest bodies as well as the lightest atoms in the world, provided that its intellect were sufficiently powerful to subject all data to analysis; to it nothing would be uncertain, the future as well as the past would be present to its eyes. The perfection that the human mind has been able to give to astronomy affords but a feeble outline of such an intelligence.” (Laplace 1820)

The roots of the notion of determinism surely lie in a very common philosophical idea: the idea that *everything can, in principle, be explained*, or that *everything that is, has a sufficient reason for being and being as it is, and not otherwise*. In other words, the roots of determinism lie in what Leibniz named the Principle of Sufficient Reason.

The Principle of Sufficient Reason generates the truths of fact, each of which states the connection between an existing individual substance and one of its infinitely many accidental features or relations. *“And that of sufficient reason, in virtue of which we hold that there can be no fact real or existing, no statement true, unless there be a sufficient reason, why it should be so and not otherwise, although these reasons usually cannot be known by us.”* [Monadology 32: <http://www.rbjones.com/rbjpub/philos/classics/leibniz/monad.htm#32>]

Leibniz believed that the world is composed of many discrete particles, each of which is simple, active, and independent of every other. Each monad is a complete individual substance in the sense that it contains all of its features – past, present, and future.

“God alone is the primary unity or original simple substance, of which all created or derivative Monads are products and have their birth, so to speak, through continual fulgurations of the Divinity from moment to moment, limited by the receptivity of the created being, of whose essence it is to have limits. In God there is Power, which is the source of all, also Knowledge, whose content is the variety of the ideas, and finally Will, which makes changes or products according to the principle of the best.” (Monadology 47, 48)

The sufficient reason for the truth of each of these propositions is that this substance does exist as a member of the consistent set of monads which constitutes the actual world. Truths of fact, then, depend upon the reciprocal mirroring of each existing substance by every other. Thus, for example, “Garth Kemerling is an oldest child” is contingently true only because my parents had no children before I was born.

But since precise physical theories began to be formulated with apparently deterministic character, the notion has become separable from these roots. Philosophers of science are frequently interested in the determinism or indeterminism of various theories, without necessarily starting from a view about Leibniz’ Principle.

Determinism requires a world that (a) has a well-defined state or description, at any given time, and (b) laws of nature that are true at all places and times.

Why take the state of the whole world, rather than some (perhaps very large) region, as our starting point? One might, intuitively, think that it would be enough to give the complete state of things on Earth, say, or perhaps in the whole solar system, at t , to fix what happens thereafter (for a time at least). But notice that all sorts of influences from outside the solar system come in at the speed of light, and they may have important effects. Suppose Mary looks up at the sky on a clear night, and a particularly bright blue star catches her eye; she thinks “What a lovely star; I think I’ll stay outside a bit longer and enjoy the view.” The state of the solar system one month ago did not fix that that blue light from Sirius would arrive and strike Mary’s retina; it arrived into the solar system only a day ago, let’s say. So evidently, for Mary’s actions (and hence, all physical events generally) to be fixed by the state of things a month ago, that state will have to be fixed over a much larger spatial region than just the solar system.

The Ancient Greek atomists Leucippus and Democritus were the first to anticipate determinism when they theorized that all processes in the world were due to the mechanical interplay of atoms, but this theory did not gain much support at the time. Determinism in the West is often associated with Newtonian physics, which depicts the physical matter of the universe as operating according to a set of fixed, knowable laws. The “billiard ball” hypothesis, a product of Newtonian physics, argues that once the initial conditions of the universe have been established, the rest of the history of the universe follows inevitably. If it were actually possible to have complete knowledge of physical matter and all of the laws governing that matter at any one time, then it would be theoretically possible to compute the time and place of every event that will ever occur (Laplace’s demon). In this sense, the basic particles of the universe operate in the same fashion as the rolling balls on a billiard table, moving and striking each other in predictable ways to produce predictable results.

Newtonian physics (mechanics) depicts a universe in which objects move in perfectly determinative ways. At human scale levels of interaction, Newtonian mechanics makes predictions that are agreed with, within the accuracy of measurement. Poorly designed and fabricated guns and ammunition scatter their shots rather widely around the center of a target, and better guns produce tighter patterns. Absolute knowledge of the forces accelerating a bullet should produce absolutely reliable predictions of its path, or so was thought. However, knowledge is never absolute in practice and the equations of Newtonian mechanics can exhibit sensitive dependence on initial conditions, meaning small errors in knowledge of initial conditions can result in arbitrarily large deviations from predicted behaviour.

However your computer starts up every time you turn it on, and (if you have not changed any files, have no anti-virus software, re-set the date to the same time before shutting down, and so on) always in exactly the same way, with the same speed and resulting state (until the hard drive fails). Such cases of repeated, reliable behavior obviously are never perfectly identical, and always subject to catastrophic failure at some point.

So at this or that point there is randomness or chaos. Thus we can state that the system is governed by underlying deterministic laws, but is chaotic.

Indeterminism is a philosophical view that in contrast to determinism states the existence of *free will*. “Free will” is a philosophical term of art for a particular sort of capacity of rational agents to choose a course of action from among various alternatives.

To have free will is to have what it takes to act freely. When an agent acts freely it means he/she does what is up to him/her. A plurality of alternatives is open to him/her, and he/she determines which he/she pursues. When he/she does, he/she is an ultimate source or origin of his/her action.

Determinism seems to pose to human free agency. It is hard to see how, if the state of the world 1000 years ago fixes everything I do during my life, I can meaningfully say that I am a free agent, the author of my own actions, which I could have freely chosen to perform differently. After all, I have neither the power to change the laws of nature, nor to change the past. So in what sense can I attribute freedom of choice to myself?

Determinism is the theory that human choices and actions can be determined from external causes; but free will is the theory that human choices and actions are determined by internal causes: that an individual is the prime mover of his/her life. The problem of free will, in this context, is the problem of how choices can be free, given that what one does in the future is already determined as true or false in the present.

The problem of free will is the problem of whether rational agents exercise control over their own actions and decisions. Addressing this problem requires understanding the relation between freedom and causation, and determining whether the laws of nature are causally deterministic. Some philosophers, known as incompatibilists, view determinism and free will as mutually exclusive. Others, labeled compatibilists (or “soft determinists”), believe that the two ideas can be coherently reconciled.

Compatibilism is the view that the existence of a concept of free will and the assumption of determinism are compatible with each other. A common strategy employed by “classical compatibilists”, such as Thomas Hobbes, is to claim that a person acts freely only when the person willed the act and the person could have done otherwise, if the person had decided to. Hobbes sometimes attributes such compatibilist freedom to the person and not to some abstract notion of will, asserting, for example, that “no liberty can be inferred to the will, desire, or inclination, but the liberty of the man; which consisteth in this, that he finds no stop, in doing what he has the will, desire, or inclination to do”. David Hume writes, “this hypothetical liberty is universally allowed to belong to every one who is not a prisoner and in chains.”

To illustrate their position, compatibilists point to clear-cut cases of someone’s free will being denied, through rape, murder, theft, or other forms of constraint. In these cases, free will is lacking not because the past is causally determining the future, but because the aggressor is overriding the victim’s desires and preferences about his own actions. The aggressor is coercing the victim and, according to compatibilists, this is what overrides free will. Thus, they argue that determinism does not matter; what matters is that individuals’ choices are the results of their own desires and preferences, and are not overridden by some external (or internal) force.

It is worth mentioning that a large portion of Western philosophical writing on free will was and is written within an overarching theological framework, according to which God is the ultimate source and sustainer of all else. Some of these thinkers draw the conclusion that God must be a sufficient, wholly determining cause for everything that happens; all suppose that every creaturely act necessarily depends on the explanatorily prior, cooperative activity of God. It is also presumed that human beings are free and responsible (on pain of attributing evil in the world to God alone, and so impugning His perfect goodness). Hence, those who believe that God is omnidetermining typically are compatibilists with respect to freedom and (in this case) theological determinism.

Free will has another important issue – *moral responsibility*. Society generally holds people responsible for their actions, and will say that they deserve praise or blame for what they do.

Unit 6. Social philosophy. Man and personality

Social philosophy explores philosophical questions about social issues and social behavior. Major themes in social philosophy include the self, social entities, and the relationship between them. The various topics in social philosophy cross over between many other philosophical categories, including epistemology, metaphysics, philosophy of politics, morality, and so on.

Major parts of social philosophy do overlap with political philosophy, especially in regards to authority, revolution, property, and rights. However, social philosophy also deals with more subtle forms of social interaction, authority, and conflict. For example, while legal philosophy addresses issues of formal government and formal law, social philosophy addresses more informal issues such as the social structure of voluntarily formed groups, such as the social power of a celebrity. In this way, we can contrast legal power, such as that of a governor, with social power, such as that of a popular high-school student.

Social philosophy can also address group dynamics and the ways in which people group together or otherwise act in union. Topics can include fashion, fads, cults, crowds, and so on and so forth.

Social philosophy also deals with social values. Social values can relate to morality, especially in regards to moral theories that define morality by what society encourages and discourages. For this reason, social philosophy can overlap with morality and moral values.

It is common knowledge that our life is social in everything. By “everything” we mean everything that is subject to human responsibility. The person’s activities are social not only because he/she performs them with others but also because he/she learns them from others, executes them according to accepted patterns and does them for his/her fellow human beings. Even wanting to be alone is social.

Human existence is fundamentally social in that

- 1) human existence has a historical character,
- 2) we need others to enter into the human world of meaning and to make it our own, and
- 3) being-together is a fundamental value which gives authentic fulfillment in our life.

The authentic being-for-others is being at the service of others that promotes the existence of the other for his/her own sake. Here, the being-for-others and the being-through-others merge.

The problem of man became acute in the 20th century, when the new factors of man’s life became scientific and technological revolution, and man’s personality started to be leveled in the gripe of information and industrial society.

Man is a special natural phenomena, creature, a combination of the biological (equaled to mammals) and the spiritual (abstract thinking, articulate language, what differs him from animals; high learning capability, mastering cultural achievements, high level of social organization).

To characterize the spiritual aspect of man we can use the concept of “personality”. **Personality** is a combination of inherent and acquired spiritual

qualities, man's inner spiritual essence. Personality is man's inherent qualities, developed and acquired in the social environment, a combination of knowledge, skills, values and goals.

Thus man is a **socially-biological entity**. With today's level of upbringing, laws, moral standards, the biological is controlled by the social.

Living, developing, upbringing in the society are key conditions for man's normal development, development of all various qualities, becoming a personality. There are some examples of men living outside the society and being raised by animals. This proves man's socially-biological nature. Thus a biological man stops being a man of full value, and even does not reach animal's level even when having been raised among animals.

What can turn a biological individual into a socially-biological personality? Of course, practice, labour. Only when doing some job, which responds to the man's interests and which is useful for the society, he can evaluate his social importance and discover his own personality.

When speaking about man and man's personality, we should pay attention to the concept of **personal qualities**, which are inherent or acquired habits, thinking and conduct (behaviour). People are distinguished by the presence of qualities and their level of development. Qualities to a great extent are formed by the influence of family and society. Below is the list on main personal qualities divided into positive, socially praised and socially disapproved qualities.

Positive moral qualities:

- humanism
- humaneness
- honour
- conscience
- modesty
- generosity
- justice
- loyalty

Socially praised qualities:

- will
- decisiveness
- wisdom
- abilities
- goals
- beliefs
- patriotism

Socially disapproved qualities:

- arrogance
- cynicism
- rudeness
- parasitism
- cowardice
- nihilism (negativism)

Man as a rule combines all kinds of qualities, some of them being developed more, others being developed less.

Another characteristic feature of every personality is presence of needs and interests.

Needs can be:

- biological (natural) – life conservancy, nutrition, reproduction;
- spiritual – enrich inner world, become familiar with cultural values;
- material – assure worthy living standards;
- social – realize professional skills, receive appreciation from the society.

Needs are what our activities are based on. They are incentives for these or those actions. To satisfy needs is an important component of our happiness as personalities.

Most of our needs (except biological ones) are formed in the society and can be realized only in the society. Each type of society has a certain level of needs and opportunities to satisfy them. The more developed the society is, the higher needs are.

Interests are certain expressions of needs, concernment. Together with needs, interests are engines for progress.

Interests can be:

- personal;
- group;
- class (interests of social groups – workers, teachers, students);
- social (interests of the society in general – in safety, law and order);
- state;
- interests of all mankind (not to start nuclear war, ecological catastrophe).

They can also be:

- material and spiritual;
- normal and abnormal;
- long-term and short-term;
- allowed and not allowed;
- common and antagonistic.

Every person, society, state has not only some separate, individual interests or their sum, but their system, hierarchy (e.g. some states aim at external expansion, others, on the contrary, focus on their internal problems). People's hierarchy of interests is different. Men's priorities differ from those of women; old people's priorities differ from those of the youth.

Presence of different hierarchy of needs and interests, their conflict and struggle are the inner engine of social development. However difference in interests assures progress and does not lead to destructive consequences only in that case if needs and interests are not antagonistic, i.e. they are not self-destroying and are compatible with common interests.

Another essential aspect of normal living in society is presence of social norms/standards. **Social standards** are generally accepted in society rules, regulating people's conduct. Social standards are of great importance for any society as they:

- maintain order and balance in society;
- suppress hidden biological instincts, thus 'ameliorate' men;
- help to adapt, adjust to society, socialize.

Types of standards:

- moral standards (regulate most common variants of people's conduct; man can be condemned in case he breaks the standards);
- standards of a group (regulate conduct in small groups like a group of friends, a criminal group, sect);
- special (professional) standards;
- standards of law. They stand apart in this list as they are established by special authorized state bodies; have a general obligatory character; are formalized, are clearly articulated in the written form; are reinforced by obligation (sanctions are possible).

Living in society, interacting with other individuals, man holds a certain living position. **Living position** is man's attitude to the world around him, which finds expression in his thoughts and actions. We can single out two main positions: (1) passive (conformist), obey others and circumstances; (2) active, aimed at changing the world, controlling the situation.

Conformist living position:

- authoritarian conformist
- group conformist
- public conformist

Active living position can have its planes:

- active, independent behaviour regarding other individuals, but subordination to the group leader;
- following social standards, but trying to dominate in a group;
- ignoring social standards and trying to find yourself outside society – in a criminal group, among hippies or in other asocial groups;
- non-acceptance of social standards, but striving to change the environment either independently or with help of others (e.g., revolutionists).

So that a man could normally enter the society, adapt in this society and so that the society would live in harmony – **upbringing**.

Upbringing is teaching social standards, spiritual values, preparing for work and future life. It is done by different social institutions: family, school, peers, army, university, professional community, society in general. A huge role is nowadays performed by mass media.

Unit 7. Society and culture

Society is a system of activities and life of people, united by the territory, epoch, traditions and culture. It is an objective reality, form of existence, which is characterized by internal structure, integrity, laws and trend of development.

The main spheres of society's life are: economic, social, political, and spiritual.

The **economic sphere** is basic, determining in the life of a society. It includes production, distribution, exchange, and consumption of material goods (material wealth). The economic sphere (1) creates the material basis for society's existence; (2) contributes to problem solving; (3) directly affects the social structure (classes, social groups); (4) influences political processes; (5) affects the spiritual sphere (schools, libraries, theatres, books).

The **social sphere** is a system of a society's interior arrangement (social groups, nations, ethnic groups), based on division of labour, ownership of the means of production and national factor.

The main elements of social structure are: classes, strata, occupational groups, city and country people, representatives of physical and mental labour, socio-demographic groups (men, women, the old, the young), national communities.

All these social groups complement and interact with each other.

Social mobility is ability to change from one social group to another. It is basis for normal existence of a society. Social mobility can be horizontal, vertical, group and individual.

As a rule, low social mobility is characteristic of a totalitarian state and states in deep economic, political and spiritual stagnation. On the other hand, high social mobility is characteristic of democratic, dynamically developing societies.

Socially mobile societies vary in the West. Thus, there are countries with the highest level of mobility (USA, Italy, Japan); average level of mobility (Canada, Great Britain); the lowest level (Holland, Switzerland, Denmark).

In the countries with low social mobility but with high level of democracy and high level of living, to move from one social class to another is either impossible or extremely difficult due to society's density, small territory, tight interconnectivity of members, existing traditions, and the fact that working places are already 'occupied'.

The highest level of unity of social groups is a *civil society*. It is a society, members of which consider themselves citizens of an organic whole, are aware of common goals, respect laws and moral traditions.

The **political sphere** is a combination of institutions and organizations, which express interests of social groups and perform management of the society.

The elements of the political system in a society are: state and state authorities, political parties, social organizations, trade unions, other institutes. All these elements of the political system perform their own functions, but at the same time they are interconnected.

The main element in the political system is a *state*, which is the system of state authorities executing state power. The main *functions* of a state are: (1) representing (it represents interests of various political and social groups); (2) regulative (to

maintain order in a society, manage social processes); (3) protective (to protect citizens from both external and internal danger); (4) foreign policy; (5) integration.

The main question of political life is that of power.

The main elements of **spiritual life** are: spiritual activity, spiritual values, spiritual needs, spiritual consumption, individual conscience, public conscience.

Spiritual activities are activities of our mind, in the process of which thoughts and feelings, images and concepts of man, material and spiritual world appear. As a result of spiritual activities we have *spiritual values* (moral, religious principles, scientific theories, works of art). In the process of spiritual activity spiritual values are spread out and consumed (perceived, accustomed by people) in accordance with *spiritual needs*.

Individual conscience is our perception of different aspects of existence. Public conscience arises from people's social practice, their production, family and everyday activities, a combination of feelings, ideas, theories, artistic and spiritual images, various views, reflecting the diversity of existence.

Science and education are also spheres of spiritual life.

Science is the most complex sphere of man's intellectual activity. It is a special system of our knowledge, which helps us soundly foretell processes and phenomena of reality and represents a system of scientific researches, organizations and institutions. Its aim is to theoretically reflect reality in the form of theoretic knowledge. Its main function is to generate and systematize objective knowledge about reality.

The main aim of *education* is to transfer knowledge to new generations. If there is no science, there is no education. That is why these two institutes should be considered together.

Education is the process and result of digestion of systematized knowledge and ways of gaining systematized knowledge. Education comprises both learning and upbringing (developing personality).

Culture (from the Latin 'cultura' stemming from 'colere', meaning "to cultivate") consists of the beliefs, behaviours, objects, customs, and world-views common to the members of a particular group or society. Through culture, people and groups define themselves, conform to society's shared values, and contribute to society.

Thus, culture includes many societal aspects: language, customs, values, norms, mores, rules, tools, technologies, products, organizations, and institutions. This latter term 'institution' refers to clusters of rules and cultural meanings associated with specific social activities. Common institutions are the family, education, religion, work, and health care.

Popularly speaking, being cultured means being well-educated, knowledgeable of the arts, stylish, and well-mannered.

Culture refers to the following ways of life, including but not limited to:

- *Language*: the oldest human institution and the most sophisticated medium of expression.
- *Arts & Sciences*: the most advanced and refined forms of human expression.

- *Thought*: the ways in which people perceive, interpret, and understand the world around them.
- *Spirituality*: the value system transmitted through generations for the inner well-being of human beings, expressed through language and actions.
- *Social activity*: the shared pursuits within a cultural community, demonstrated in a variety of festivities and life-celebrating events.
- *Interaction*: the social aspects of human contact, including the give-and-take of socialization, negotiation, protocol, and conventions.

Culture is a shared, learned, symbolic system of values, beliefs and attitudes that shapes and influences perception and behaviour. Must be studied “indirectly” by studying behaviour, customs, material culture (artifacts, tools, technology), language.

Culture is not the same thing as a society, which may or may not include multiple cultures. Sociologists define society as the people who interact in such a way as to share a common culture. The cultural bond may be ethnic or racial, based on gender, or due to shared beliefs, values, and activities. The term society can also have a geographic meaning and refer to people who share a common culture in a particular location. For example, people living in arctic climates developed different cultures from those living in desert cultures.

Culture and society are intricately related. A culture consists of the “objects” of a society, whereas a society consists of the people who share a common culture. When the terms culture and society first acquired their current meanings, most people in the world worked and lived in small groups in the same locale. In today’s world of 6 billion people, these terms have lost some of their usefulness because increasing numbers of people interact and share resources globally.

When speaking about cultures and cultural diversity, we should also mention several concepts closely related to culture, first of them being ‘national culture’. A *nation* is a historically determined community, which is characterized by the unity of territory, economic life, language and culture.

The main features of a nation are:

- national language;
- national culture (music, theatre, cinema etc);
- unity of social and economic life;
- traditions and customs;
- school;
- press;
- common territory.

National culture includes:

- language, literature, music;
- clothing;
- food;
- construction and interior decoration of houses;
- holidays;
- ceremonies;
- traditions and customs;

- etiquette (ceremonial functions).

Cultural diversity is the presence of multiple cultures and cultural differences within a society.

Smaller cultural groups that exist within but differ in some way from the prevailing culture are called *subcultures*. Examples of some subcultures include “heavy metal” music devotees, body-piercing and tattoo enthusiasts, motorcycle gang members, and Nazi skinheads. Members of subcultures typically make use of distinctive language, behaviours, and clothing, even though they may still accept many of the values of the dominant culture.

A *counterculture* comes about in opposition to the norms and values of the dominant culture. Members of countercultures – such as hippies and protest groups – are generally teenagers and young adults, because youth is often a time of identity crisis and experimentation.

Many people see the United States as “a melting pot” comprised of a variety of different cultural, subcultural, and countercultural groups. When the mainstream absorbs these groups, they have undergone *assimilation*. However, people today increasingly recognize the value of coexisting cultural groups who do not lose their identities.

This perspective of *multiculturalism* respects cultural variations rather than requiring that the dominant culture assimilate the various cultures. It holds that certain shared cultural tenets are important to society as a whole, but that some cultural differences are important, too.

Ethnocentrism involves judging other cultures against the standards of one's own culture. *Norms* within a culture frequently translate into what is considered “normal,” so that people think their own way of doing things is “natural.” These same people also judge other people's ways of doing things as “unnatural.” In other words, they forget that what may be considered normal in their country is not necessarily so in another part of the world.

A potentially problematic form of ethnocentrism is *nationalism*, or an overly enthusiastic identification with a particular nation. Nationalism often includes the notion that a particular nation has a God-given or historical claim to superiority. Such nationalism, for instance, was a special problem in World War II Nazi Germany.

Sociologists strive to avoid ethnocentric judgments. Instead, they generally embrace *cultural relativism*, or the perspective that a culture should be sociologically evaluated according to its own standards, and not those of any other culture. Thus, sociologists point out that there really are no good or bad cultures. And they are better able to understand the standards of other cultures because they do not assume their own is somehow better.

Customs and traditions are norms that regulate our everyday life (clothing, greetings, nutrition, personal hygiene), what is accepted.

Unit 8. Man and nature

The concept of 'nature' has two main meanings. In a broad sense, it is the whole world around (including man and society), i.e. the Universe. In a narrow sense, it is the environment where man and society live (surface of the Earth with its characteristics, climate, natural resources etc).

Nature is an essential condition of the life of man and society, as life itself can develop only in a particular, unique environment (air, water, optimal temperature, food). Such unique conditions exist only on the Earth.

What are the advantages of the Earth? What makes it optimal for human life?

- The Sun, around which the Earth orbits, is medium-sized.
- The Earth is at the optimal distance from the Sun (150 mln km).
- The Earth has the moderate size, gravity which enables to create the atmosphere and other conditions of life.
- The atmosphere protects the Earth from radiation of the Sun, contains oxygen and nitrogen necessary for breathing and existence of life forms, and also maintains temperature balance.
- Water.

With appearance of man and society nature entered a new stage of its existence, it started experiencing **anthropogenous** (human-caused) influence.

Originally relations of man and nature were mutual (or two-sided): man (without complicated technical means) got benefit from nature (food, natural resources), and nature affected man, by the way man was not protected from nature (natural hazards, climate) and depended on it greatly.

As society and state were established, technical equipment became more complicated, influence of nature reduced while man's influence on nature increased.

Starting from the 16th century, when a great number of scientific discoveries, inventions were made and industrial relations grew complicated, man's influence on nature became systematic and universal. Nature was now considered not an independent reality, but a source of raw materials to satisfy man's needs.

In the 20th century, when scientific and technological progress grew into scientific and technological revolution, anthropogenous influence reached the catastrophic level.

Now the world of technology (technosphere) turned into an independent reality, so man has almost complete dominance over nature.

The main problem (and danger) of today's anthropogenous influence consists in discrepancy between man's unlimited needs, also almost unlimited scientific and technical opportunities of influencing nature and limited natural resources.

In this connection an ecological problem arises – the problem of environment protection from man's influence.

The problem of **social ecology**: protection of man, his personality, health, society in general from consequences of scientific and technological progress.

Today man is affected not by nature, but by mass influence of society and technology: (1) dependence on mass media, cybernetics; (2) growth of urbanization (man loses personality under pressure of megacities); (3) strong influence of society

and state – morals, traditions, laws, taxation, political institutes. Thus social ecology aims at shielding man from negative influence of society and scientific and technological progress.

The **problem of population** comprises several aspects:

- (1) population growth leads to increase in number of people and, consequently, their needs, which in its turn leads to a greater exploitation of nature;
- (2) due to population growth, aggravation of contradictions inside society, as goods won't be enough for everybody (What is the 'critical mass', limit of population?)
- (3) problem of quality of population: will material opportunities be enough in society, each family (especially in underdeveloped countries) to ensure education, upbringing, healthcare?

The problem has a reverse side. In some countries we can observe **negative dynamics** (decrease) in population growth. There are two main reasons:

- (1) highly-organized society requires a lot of effort from man (education, job), which does not allow to have large families, only one or two children;
- (2) people in poor countries, due to numerous difficulties and lack of a social security system, try not to have children at all.

However in Asian or African countries we observe overgrowth of population: China – 1,3 billion, India – 800 million, Brazil – over 100 million. This is caused by lack of birth control, on the one hand, and, on the other hand, by traditions. What can overgrowth of population lead to? (decrease in quality).

So is there a limit for population growth? The **population theory** (Thomas Robert Malthus): The power of population is indefinitely greater than the power in the earth to produce subsistence for man. Population, when unchecked, increases in a geometrical ratio. Subsistence increases only in an arithmetical ratio.

- 100 – 230 million people;
- 1000 – 300 million;
- 1850 – 1 billion;
- 1930 – 2 billion;
- 1976 – 4 billion;
- 1987 – 5 billion;
- 2000 – 6 billion;
- 2025 – 8 billion (expected).

According to scientific estimations, the Earth will be able to subsist approximately 60 billion people (which might happen in 2150 – 2200).

As a whole, the problem of human-society-nature relations has a global character. To prevent technogenic catastrophe mankind should:

- (1) lower their dangerous anthropogenous influence;
- (2) start solving ecological problems;
- (3) pay more attention to social ecology;
- (4) search other sources of their existence;
- (5) control birth, solve the problem of population.

Unit 9. Man and historical process

The concept of history plays a fundamental role in human thought. It invokes notions of human agency, change, the role of material circumstances in human affairs, and the putative meaning of historical events. It raises the possibility of “learning from history.” And it suggests the possibility of better understanding ourselves in the present, by understanding the forces, choices, and circumstances that brought us to our current situation. It is therefore unsurprising that philosophers have sometimes turned their attention to efforts to examine history and man as a historical entity.

The content of any historical fact depends on the level of development of this or that society and are the result of some actor’s activity in the historical process. Under *historical process* we understand a timed sequence of changing events that are the result of the activity of many generations of people.

The actors in the historical process are usually individuals or communities that take a direct participation in it. Such actors can be people’s masses, social groups and associations, individual historical personalities.

People’s masses are social communities in some definite territory (usually it is the territory of a country), the members of which share the common mentality, culture, traditions and customs and altogether make material and spiritual values. People’s masses are the most important actors in the historical process, and play a determining and even sometimes a decisive role in it. However some philosophers state it is essential to differentiate ‘people’ and ‘mass’. They claim that as distinct from people, a ‘mass’ represents a group of people that are not connected with each other. Such groups emerge from time to time and in their activity are lead not by their reason, but emotions, and their striving for destruction is stronger than their striving for creation.

Social groups as actors in the historical process are singled out basing on different principles – age, sex, professional sphere, religion etc. The most widespread social groups that played a great role in the historical process are classes, and nations. Each of the social groups shares some common features, which in total comprise the social character of this group.

Associations are voluntary, autonomic formations created on the basis of some common interests in order to achieve a specific goal, which is common for all their members. They are political parties, trade unions.

Historical process is greatly affected also by historical personalities, or as they are sometimes called historical actors. Traditionally historical personalities are those who have authority (monarchs, presidents etc.). But they may also include great scientists and men of culture and arts.

Thus historical process is formed by actions of individual personalities, who perform important social functions, and associations of people and people’s masses in general.

Philosophers have two opposite views on the philosophy of history. Some regard history as a chaotic, random process, which lacks logic or rules (e.g. irrationalists). Others (most of philosophers) see certain logic in history, considering it a purposeful,

law-governed process. Among advocates of the second view on history we can single out the following approaches: formational, civilizational, culturologic.

The key concept of **formational approach** (Karl Marx and Friedrich Engels) is socioeconomic formation, which comprises labour-management relations, level of development of productive forces, social relations, government at a specific stage of historic development. According to this point of view, all history is law-governed process of change of socioeconomic formations. And each formation is a higher social organization than the previous one. There are 5 socioeconomic formations: (1) primitive communal; (2) slave-owning; (3) feudal; (4) capitalistic; (5) communist (socialist).

Advantages of the approach: understanding history as a law-governed objective process, working out economic mechanisms of development, systematization of historic process. Disadvantages: neglect of other factors (cultural, national, spontaneous), detachment from real social practice.

The key concept of **civilizational approach** (Arnold Toynbee) is civilization, which is a stable community of people united by spiritual traditions, similar way of life, geographic and historic frames. History is a nonlinear process. Toynbee presented history as the rise and fall of civilizations. Toynbee displayed striking parallels in their origin, growth, and decay.

According to Toynbee, civilizations can be basic and local. Basic civilizations: Sumerian, Babylonian, Minoan, Hellenic (Greek), Chinese, Hindu, Islamic, Christian. Local (national) civilizations: American, German, Russian etc. Of the 26 civilizations Toynbee identified, sixteen were dead by 1940, nine of the remaining ten were shown to have already broken down. Only Western civilization was left standing.

The driving forces of history are: (1) challenge, thrown to a civilization from outside (unfavourable geographic position, lagging behind other civilizations, military aggression); (2) response to a challenge; (3) activity of talented, great people (chosen by God). The development of history is based on the scheme 'challenge – response'.

As for its internal structure, a civilization consists of: (1) a creative minority and (2) a passive majority. The creative minority leads the passive majority to response challenges thrown down at a civilization. The creative minority is not always able to determine the life of the passive majority. The majority tends to 'stifle' the minority's energy and absorb it. This is when development stops, and stagnation begins.

Civilizations are finite in their existence: like human beings, they are born, grow, live and die. Thus they go through 4 stages: (1) birth; (2) growth; (3) crisis; (4) disintegration that ends in death and complete dissolution.

The key concept of **culturologic approach** (Oswald Spengler) is culture, which comprises religion, traditions, material and spiritual life. It is an autonomous, enclosed, isolated reality. It is born, it lives and decays. 8 cultures: Indian, Chinese, Babylonian, Egyptian, Antique, Arabic, Russian, West-European.

S. Huntington divides the world's cultures into seven current civilizations: Western (including Central and western Europe, North America and Australia), Latin American, Confucian, Japanese, Islamic, Hindu and Slavic-Orthodox. In addition he judged Africa only as a possible civilization depending on how far one viewed the

development of an African consciousness had developed. These civilizations seem to be defined primarily by religion with a number of ad hoc exceptions. Israel is lumped together with the West, Buddhist states and the whole religion is completely ignored.

Unit 10. Moral philosophy. Ethics and morality

The terms ethics and morality are often used interchangeably and can mean the same in casual conversation, but morality refers to moral standards or conduct while ethics refers to the formal study of such standards and conduct.

Ethics is the formal study of moral standards and conduct. **Ethics** (also known as **moral philosophy**) is a branch of philosophy which seeks to address questions about morality; that is, about concepts like good and bad, right and wrong, justice, virtue, etc. For this reason, the study of ethics is also often called “moral philosophy.” What is good? What is evil? How should I behave – and why? How should I balance my needs against the needs of others?

The field of ethics is usually broken down into three different ways of thinking about ethics: descriptive, normative and analytic.

The category of **descriptive ethics** is the easiest to understand – it simply involves *describing* how people behave and/or what sorts of moral standards they claim to follow. Descriptive ethics incorporates research from the fields of anthropology, psychology, sociology and history as part of the process of understanding what people do or have believed about moral norms.

The category of **normative ethics** involves creating or evaluating moral standards. Thus, it is an attempt to figure out what people *should* do or whether their current moral behavior is reasonable. Traditionally, most of the field of moral philosophy has involved normative ethics – there are few philosophers out there who haven’t tried their hand at explaining what they think people should do and why.

The category of **analytic ethics**, also often referred to as **metaethics**, is perhaps the most difficult of the three to understand as it comprises careful analysis of the meaning and justification of ethical claims.

Understanding the how the exact same ethical question can be and is addressed in descriptive, normative and analytic ethics can be difficult until you have had some practice, so here is a series of easy examples which will help make the differences more clear.

1. Different societies have different moral standards.
2. This action **is** wrong in this society, but it **is right** in another.
3. Morality is relative.

(1) In descriptive ethics, it is simply observed that different societies have different standards – this is a true and factual statement which offers no judgments or conclusions. (2) In normative ethics, a conclusion is drawn from the observation made above, namely that some action *is wrong* in one society and *is right* in another. This is a *normative* claim because it goes beyond simply observing that this action is *treated* as wrong in one place and *treated* as right in another. (3) In analytic ethics, an even broader conclusion is drawn from the above, namely that the very nature of morality is that it is relative. This position argues that there are no moral standards independent of our social groups, and hence whatever a social group decides is right **is** right and whatever it decides is wrong **is** wrong – there is nothing “above” the group to which we can appeal in order to challenge those standards.

1. People tend to make decisions which bring pleasure or avoid pain.

2. The moral decision is that which enhances well-being and limits suffering.
3. Morality is simply a system for helping humans stay happy and alive.

(1) The first, from descriptive ethics, simply makes the observation that when it comes to making moral choices, people have a tendency to go with whatever option makes them feel better or, at the very least, they avoid whichever option causes them problems or pain. This observation may or may not be true, but it does not attempt to derive any conclusions as to how people *should* behave. (2) The second statement, from normative ethics, does attempt to derive a normative conclusion – namely, that the most moral choices *are* those which tend to enhance our well-being, or at the very least limit our pain and suffering. This represents an attempt to create a moral standard, and as such, must be treated differently from the observation made previously. (3) The third statement, from analytic ethics, draws yet a further conclusion based upon the previous two, this one about the very nature of morality itself. Instead of arguing, as in the previous example, that morals are all relative, this one makes a claim about the purpose of morals – namely, that moral exist simply to keep us happy and alive.

Morality means a code of conduct or a set of beliefs distinguishing between right and wrong behaviors. Morals are arbitrarily and subjectively created by society, philosophy, religion, and/or individual conscience.

An important feature of morality is that it serves as a guide for people's actions. Because of this, it is necessary to point out that moral judgments are made about those actions which involve choice. It is only when people have possible alternatives to their actions that we conclude those actions are either morally good or morally bad.

Today, with advancing technology, difficult moral situations come upon us faster than we can even create the questions, much less find the answers. So what are the issues of today's moral philosophy? First of all they relate to biology and medicine.

Bioethics is an especially difficult field because it regularly concerns some of the most troubling topics, relating to both the beginning and the end of life.

- *Artificial Wombs:* Is it the end of the natural motherhood?
- *Pregnancy and Privacy:* For the most part, people believe that their medical issues are and should remain private. The status of your health is not something that should be made public record or revealed to anyone not involved in your health care (like doctors, nurses, and insurance companies). But does pregnancy qualify as a health matter that should be kept private?
- *Drug Use and Fetal Abuse:* Should women who abuse drugs while they are pregnant be charged with delivery of drugs to a minor and child abuse after their baby is born?
- *Gender Selection:* Should parents be allowed to select the gender of their child? Would it be ethical for people with fertility problems to choose which fertilized embryos get implanted and have the rest discarded as being the “wrong” gender?
- *What is Death?* Just what does it mean to be “alive,” and what is “death”?

- *Selling Organs*: Should people be allowed to sell their organs? Currently, exchanging organs for money or other “valuable considerations” is illegal, but some members of the medical and business communities would like to change that.
- *Genes and Identity*: The question how a person establishes and maintains an identity is a thorny one. Everyone seems to feel the need for some way to identify themselves in a complex and variable world; the problem is, it's not exactly clear just what “identity” should entail. Is it more about who you are as a person, right now, or is more about “what” you are, in the sense of your heritage and cultural background?

Important questions regarding ethics, morality and social behaviour as they relate to issues raised in *modern culture* – for example reality television, prostitution, copyrights, and more.

- *Copyright*: Copyrights exist so that a person who creates a new work can derive some profit from it. After a period of time, the rights to the work are supposed to go to the public so that everyone can benefit from it and to encourage people to produce new works. Have current laws undermined this relationship?
- *Keeping Armageddon Secret*: Would you want to be informed about an approaching cataclysmic event, like an asteroid or comet, even if nothing could be done about it? Or would you rather be kept in the dark?
- *Reality TV – Should We Watch?* Media both in America and around the world seem to have “discovered” that so-called “reality” shows are very profitable, resulting in a growing string of such shows in recent years. Although not all are successful, many do achieve significant popularity and cultural prominence.
- *RFID Tags: the End of Privacy?* Imagine this: you walk into a local store and within seconds the people on duty know your pants size (and how much it fluctuates), that you prefer chocolate ice cream, that you buy a new tube of hemorrhoid cream every three months or so, which stores you usually shop in, your credit rating, and the number of miles currently on all four of your tires – and that’s just for starters.

Another essential issue is that of *war and morality*. War seems to be the most destructive and horrific type of human interaction. No other venue allows people to kill each other in such massive numbers or to cause such incredible and widespread suffering. Wars often take years to develop, can last for years longer, and the effects reverberate for decades if not centuries.

If war is so awful, why do people continue to allow it to happen? Why don’t we simply eliminate it? Curiously, some people actually seem to like war. Armed combat is glorified in song and story, with many throughout history praising “martial values” for making us better, stronger, and more worthwhile human beings (even as we kill other human beings).

To the average person in society today, however, the prospect of war is often very depressing. People don’t feel like they are in control of their own destinies and fear that the decisions of far away political leaders will take them all to the brink of

destruction – a prospect made much more likely in a world of nuclear, chemical, and biological weapons.

The **Golden Rule** is an ethical code that states one has a right to just treatment, and a responsibility to ensure justice for others. It is also called the ethic of reciprocity. A key element of the golden rule is that a person attempting to live by this rule treats all people, not just members of his or her in-group, with consideration. The negative form is “do not do to others what you would not like to be done to you”. The golden rule has its roots in a wide range of world cultures. It was present in the philosophies of ancient Judaism, India, Greece, and China. Principal philosophers and religious figures have stated it in different ways, but its most common phrasing is attributed to Jesus Christ: “Do unto others as you would have them do unto you.”

Ancient Egypt: “Now this is the command: Do to the doer to cause that he do” (2040 – 1650 BC); “That which you hate to be done to you, do not do to another” (1080 - 332 BCE).

Ancient Greece: “Avoid doing what you would blame others for doing” (Thales); “Do not to your neighbor what you would take ill from him” (Pittacus); “One should never do wrong in return, nor mistreat any man, no matter how one has been mistreated by him” (Plato).

Christianity: “Therefore all things whatsoever ye would that men should do to you, do ye even so to them: for this is the law and the prophets” (Matthew 7:12); “And as ye would that men should do to you, do ye also to them likewise” (Luke 6:31).

Islam: “Hurt no one so that no one may hurt you”; “None of you [truly] believes until he wishes for his brother what he wishes for himself”; “The most righteous of men is the one who is glad that men should have what is pleasing to himself, and who dislikes for them what is for him disagreeable”.

The Perfect Man. In every society they have their own view on what the perfect man should be like. The perfect man is an ideal, a role model.

Ancient Greece: The idea of the perfect man is based on mind. Man’s soul consists of three parts: mind, will, senses. The highest of them is mind. So the perfect man is that one whose mind is developed most, and will and senses are controlled by mind. But all people appear to have mind to at least some extent, and the perfect man is the person who always seeks the truth, perfects himself. And to start seeking the truth is possible only when one comes to realization that he knows nothing.

East: Mind is not on the top of the universe and does not play a dominant role in man’s life. Everything – mind, will, senses and intuition – is equal. *Buddhism*: Man’s activity should be directed inside (not outside). It takes much more effort to change yourself. The perfect man is free from desired, as desires are source of suffering. *Confucianism*: the man never stops learning (he is young while he is learning); the perfect man respects elder people, respects and follows traditions, respects the past. Everything is good in moderation.

Unit 11. Meaning of life. Freedom and responsibility

For nearly everyone it is important to think that his or her life has a purpose. But these purposes may be various: the purpose of one person's life may be to achieve one kind of goal, that of another person may be to achieve a very different kind of goal.

If for Genghis Khan the meaning of life was "To crush your enemies, see them driven before you, and to hear the lamentation of their women"; for the characters is Monty Python's: "Life's a game, you sometimes win or lose"; "Well, it's nothing very special. Uh, try to be nice to people, avoid eating fat, read a good book every now and then, get some walking in, and try to live together in peace and harmony with people of all creeds and nations."

And it's practically the same for us: we understand the meaning of life is to get a higher education, to get married, to earn a lot of money, to raise children etc. And one and the same goal can have a different meaning for different people. Thus, somebody wants to enter a university to study a speciality, somebody – to gain knowledge, or someone third – to continue their dynasty.

However we should differentiate between the *purpose* and *meaning* of life. As the meaning is not simply a purpose, but the highest, final purpose of life and at the same time the utmost foundation of life. This problem is closely related to the problem of human essence, as when trying to solve the problem of human essence, we answer the question of the meaning of life:

<i>Essence of man</i>	<i>Visions of the meaning of life</i>
Spiritual	Spiritual perfection, serving God
Social	Serving the society, living for other people
Reasonable	Serving the Truth, comprehending the world and oneself
Biological	Living for oneself, for pleasure and happiness
Creative	Creating Beauty, changing the world
No essence	There is no meaning of life

A lot of people think that they should start thinking about their meaning in life when they are already old, not when they are still young. Or other people think that this problem can never be solved. However if a person says that he/she does not know, has not yet decided what is his/her meaning of life, it does not mean that they do not have a meaning of life – anyway all their actions and behavior have some

foundation. If they do not realize the meaning, it reveals not that the problem is impossible to solve, but the depth of consciousness.

Let's have a look at how different philosophers in different periods understood the meaning of life.

First, ancient Greek philosophy. *Plato*: the meaning of life is in attaining the highest form of knowledge, which is the Idea (Form) of the Good, from which all good and just things derive utility and value. Human beings are duty-bound to pursue the good, but no one can succeed in that pursuit without philosophical reasoning, which allows for true knowledge.

Aristotle: Everything is done with a goal, and that goal is 'good'. ("Every skill and every inquiry, and similarly, every action and choice of action, is thought to have some good as its object. This is why the good has rightly been defined as the object of all endeavour"). Yet, if action A is done towards achieving goal B, then goal B also would have a goal, goal C, and goal C also would have a goal, and so would continue this pattern, until something stopped its infinite regression. Aristotle's solution is the Highest Good, which is desirable for its own sake, it is its own goal. The Highest Good is not desirable for the sake of achieving some other good, and all other 'goods' desirable for its sake. This involves achieving eudaemonia, usually translated as "happiness", "well-being", "flourishing", and "excellence".

Cynics: the purpose of life is living a life of Virtue that agrees with Nature. They reject conventional desires for wealth, power, and fame, by being free of the possessions.

Epicurus: the greatest good is in seeking modest pleasures, to attain tranquility and freedom from fear via knowledge, friendship, and virtuous, temperate living.

Stoicism: living according to reason and virtue is to be in harmony with the universe's divine order, entailed by one's recognition of the universal logos (reason), an essential value of all people. The meaning of life is freedom from suffering through apatheia, that is, being objective, having "clear judgment", not indifference (to develop personal self-control).

In the Enlightenment period the meaning of life was focused more on the relationship between individuals and their society.

20th century. *Pragmatism*: anything useful and practical is not always true, arguing that what most contributes to the most human good in the long course is true. Useful understanding of life is more important than searching for an impractical abstract truth about life. The meaning of life is discoverable only via experience.

Postmodernism: human nature is constructed by language, or by structures and institutions of human society. So the meaning of life can only be understood within a social and linguistic framework, and must be pursued as an escape from the power structures that are already embedded in all forms of speech and interaction.

Naturalistic pantheism: the meaning of life is to care for and look after nature and the environment.

There are also perspectives on the meaning of life from the point of view of different religions. We'll take only the world religions.

Christianity: central beliefs derive from the teachings of Jesus Christ. The meaning of life in Christianity is to seek divine salvation through the grace of God

and intercession of Christ. So one should live like Christ did, love God with all one's heart, soul, and mind, and love fellow human beings as one should be loved.

Islam: the meaning of life is to seek the pleasure of Allah by abiding by the Divine guidelines revealed in the Qur'an and the Tradition of the Prophet. For the pleasure of Allah, via the Qur'an, all Muslims must believe in God, his revelations, his angels, his messengers, and in the "Day of Judgment".

Buddhism does not speak about the meaning or the purpose of life, but about the potential of human life to end suffering through detaching oneself from cravings and conceptual attachments. The only way to give a meaning to life, or rather, to eliminate pain, is through some sort of vacuum of ideas and feelings: "The person who is searching for his own happiness should pull out the dart that he has stuck in himself, the arrow-head of grieving, of desiring, of despair"; "The greatest of victories is the victory over oneself."

Freedom and responsibility. Nowadays many people are not striving for freedom but trying to get rid of it. Does this statement really describe today's understanding of freedom? To answer this question, let's have a look at how freedom was understood in different epochs.

Primitive society: man grew in unity with nature. Despite dependence on spontaneous natural phenomena, fear of gods, death and afterlife, man felt being independent from the world around and other people. Although this independence (or freedom) was poorly developed, thus it was dimly realized.

Ancient philosophy: ambiguity (duality) of human nature: man as part of the Universe must obey its laws, and on the other hand, man is free. Freedom (autonomy) manifests itself in various spheres of human life: a great variety of philosophical schools, creative activities (arts), political life etc. However this freedom is politically and socially limited.

Epicurus: theory of ataraxia (internal stability, relative independence on surrounding circumstances). Freedom lies in moderate choice of pleasures, mental tranquility, and proud tenacity in case of unfavourable conditions. A free man is an ascetic, who avoids suffering (freedom from corporal punishment and mental disturbances).

Middle Ages: independence grows, freedom grows. The problem of freedom is the problem of divine determinism and free will. Almighty God creates the world and the man in it. All man's activity is determined. The world, being God's creation, cannot be evil. On the other hand, existence of evil cannot be denied. So is evil part of creation or is it a result of man's activity?

In freedom there is opportunity for both good and evil. God endows His creation freedom and tools to do good. So if a man chooses evil, he is the only one to be responsible for his actions. Thus philosophers in the Middle Ages speak about freedom and necessity.

Modern era: individualism principle, efflorescence of sciences → deterministic principle, however even when everything is determined, man is still responsible for his actions.

20th century, existentialism: peak of independence and freedom (political freedom, economic independence) → too much freedom, negative trends (first man is

ready for any suffering to feel free, thus freedom loses its value, leads to crime) → man wants to get rid of this intolerable burden: the main problem of existentialism is that of the man facing freedom. To feel free is difficult. Freedom is freedom of choice, but the state of choosing may cause feeling of oppression, anxiety. Choice implies knowing options available, foreseeing possible consequences, confidence in the right choice, and responsibility for the choice. As freedom progresses, individuals become isolated, lose their identity with others. It causes loneliness, hostility. The main conclusion: although freedom is the highest value, it is difficult to live in freedom.

Unit 12. Violence and nonviolence

In modern philosophy violence is regarded as sociohistorical category. It appeared at a particular stage of historic development alongside with private ownership of the means of production, division of society into classes and establishment of the state machine. In the industrial era it was nature that suffered violence first, but afterwards it was society as a whole.

This is how Karl Marx came up with the idea of violent social revolution as a means of reinforcing social progress: he justified violence as a class phenomenon, which could be used in the fight for the social ideal of the downtrodden (suppressed) class. However history showed that approving of violence leads to amorality that justifies destruction, death and terroristic dictatorship, which is a negative phenomenon from all angles.

Violence is nevertheless an integral element of social relations and political life in a modern society. Violence is social relation, in the course of which some individuals (or groups) master others, their abilities, productive forces, property.

As we see from such a definition, violence has a social character; it is applied in all spheres of social life – economic, political and spiritual. Its subjects and objects can be individuals, classes, groups of people, nations and states.

Social violence can be of two types: (1) direct violence, which is accompanied by actual use of force (war, political repression) and (2) indirect (concealed) violence, when violation of human's rights and religious freedom, racism, there is no actual use of force (various forms of spiritual, psychological pressure, economic blockade) or there is only threat of using force (political pressure).

The problem of violence is treated differently by philosophers today. First, it is dealt with from the point of view of social ethology (study of animals' behavior in their natural environment). Austrian biologist Conrad Lorenz ("On Aggression") proves the idea of biogenetic determinism of social violence, of its ethological nature. Thirst for aggression and violence are an inherent human's instinct and a source of all information. Human is different from animals only because human is not able to kill anyone of the same type. So human is genetically imperfect, and cannot be adapted as a biological species, which makes him aggressive.

Some western philosophers try to present violence as an abstract and ethical phenomenon, without revealing its social nature. It is evil caused to human; it is use of force at someone; it is an irrational activity causing damage in one form or another, it is violation of somebody's interests and rights. Thus violence considered a negative phenomenon. Violence is an obstacle: it takes places when an obstacle is created for full somatic (=body) and psychological realization of human's potentials. Forms of violence in the modern world: unequal distribution of welfare, unemployment, violation of human's rights and religious freedom, racism, sexism, corruption, drug addiction, violence in the family or in streets, stress, fear, pressure of Mass Media. Violence is negative in its nature. Creating an atmosphere of fear is the most important tool of oppressors.

Erich Fromm: every human is aggressive inside, however it is through social conditions that it shows up. Human has two planes: biophilia (love for life,

happiness) and necrophilia (love for death). The latter flourishes in today's mechanized society and is based on conformism and fear of complicated life. Violence impedes true social progress encouraging negative development of human nature.

Nonviolence as theory arises in the 20th century and is connected with the names of Leo Tolstoy, Mahatma Gandhi and Martin-Luther King. Nonviolence is a post-violent stage of fight against social injustice. It acts as an unconditional ban to violence. It is aimed at managing conflicts that were originally managed with help of morally allowed violence. Out of the three possible reactions to military injustice – obedience, violent resistance, and nonviolent resistance – nonviolent resistance is the highest, it implies higher mental maturity than to react violently or to accept violence. Violence is a cultural vision of opposing violence in all its forms. It is part and parcel of all religions and world cultures.

According to Leo Tolstoy, Mahatma Gandhi and Martin-Luther King, nonviolence is part of human existence, it should be cultivated in every person so that it could be transferred to society. The principle of nonviolence implies that: (1) man is the highest value in the world, and that is why he (even an enemy!) should be treated with respect; (2) every man has conscience and thus can change his position; the basis for nonviolent actions is deep trust in human and belief in humaneness; nonviolence gives chance to reveal humaneness; (3) one should study methods and strategies of nonviolence, self-perfecting and self-discipline, ability to conduct a dialogue, nonparticipation. It all should be cultivated.

Leo Tolstoy: nonresistance to evil through violence, abstinence from offences or retaliation, love instead of vengeance.

Mahatma Gandhi: principles of Ahimsa (nonviolence) and Satyagraha (truth power). "An eye for an eye makes the whole world blind". Gandhi saw truth as something that is multifaceted and unable to be grasped in its entirety by any one individual. All carry pieces of the truth, he believed, but all need the pieces of others' truths in order to pursue the greater truth. This led him to believe in the inherent worth of dialogue with opponents, in order to understand motivations. On a practical level, the willingness to listen to another's point of view is largely dependent on reciprocity. In order to be heard by one's opponents, one must also be prepared to listen.

Gandhi's thought ahimsa precludes not only the act of inflicting a physical injury, but also mental states like evil thoughts and hatred, unkind behavior such as harsh words, dishonesty and lying, all of which he saw as manifestations of violence incompatible with ahimsa.

Martin-Luther King: 6 principles of nonviolence: (1) nonviolence as a method of fight requires courage, it is an active nonviolent opposition; (2) in fight one cannot humiliate their opponent, but one should win his friendship and understanding; (3) nonviolence fights evil, but not its victims that had to do this evil; (4) one should be ready to accept suffering and not to give a Roland for an Oliver, be ready for imprisonment; (5) spiritual or physical violence is now allowed, the centre of nonviolence is the principle of love (agape – merciful love, godly love), spreading of

goodwill; (6) the world is based on justice, and furthering justice through love and nonviolence we contribute to harmony in the universe.

Methods of nonviolent actions: dialogue, negotiations, mediation. When preparing for a dialogue you should learn your opponent's positive values and tell him, also you should realize your own responsibility in the conflict; you should respect your opponent; make realistic and constructive suggestions. Reconciliation is the ultimate total of such activities.

Nonviolence is not passivity, but a much more effective reaction to violence.

Unit 13. Epistemology

Epistemology (from Greek ἐπιστήμη - *episteme*-, “knowledge, science” + *λόγος*, *logos*) or **theory of knowledge** is the branch of philosophy concerned with the nature and scope (limitations) of knowledge.

In epistemology in general, the kind of knowledge usually discussed is propositional knowledge, also known as “knowledge-that” as opposed to “knowledge-how.” For example: in mathematics, it is known *that* $2 + 2 = 4$, but there is also knowing *how* to add two numbers. Many (but not all) philosophers therefore think there is an important distinction between “knowing that” and “knowing how”, with epistemology primarily interested in the former. E.g., the act of balance involved in riding a bicycle: the theoretical knowledge of the physics involved in maintaining a state of balance cannot substitute for the practical knowledge of how to ride, and that it is important to understand how both are established and grounded.

Questions asked in epistemology:

- What can we know?
- How can we know it?
- Why do we know some things, but not others?
- How do we acquire knowledge?
- Is knowledge possible?
- Can knowledge be certain?
- How can we differentiate truth from falsehood?
- Why do we believe certain claims and not others?

Epistemology is the investigation into the grounds and nature of knowledge itself. The study of epistemology focuses on our means for acquiring knowledge and how we can differentiate between truth and falsehood.

Epistemology is important because it is fundamental to how we think. Without some means of understanding how we acquire knowledge, how we rely upon our senses, and how we develop concepts in our minds, we have no coherent path for our thinking. A sound epistemology is necessary for the existence of sound thinking and reasoning.

Can the world be perceived? Three cognitive strategies: yes → cognitive optimism; no → agnosticism; doubts → skepticism.

We perceive the world in two ways: *directly* and *indirectly* (studies, books, films etc).

Knowledge is defined by the Oxford English Dictionary as (1) expertise, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject, (2) what is known in a particular field or in total; facts and information or (3) awareness or familiarity gained by experience of a fact or situation. A standard and reasonably widely (but not universally) accepted in philosophy definition for *knowledge is justified true belief*.

Belief: For me to be said to know something, I need to believe it. If I don't believe that snow is white, I can't be said to know that snow is white.

True: It is not enough for something to be knowledge just because it is believed. It also has to be true, independent of any belief I have. It has to actually be a fact, in

the world. So if I believe that Shakespeare wrote Hamlet, and (see next condition) I have very solid grounds for believing it (lots of books say so etc), but it turns out that Bacon wrote it instead, then I never *knew* that Shakespeare wrote Hamlet. I just, mistakenly, thought that I knew it.

Justified: However, even if I believe something that is also true, if my justification for that belief is not adequate, then I can't be said to know it. Say I claim to know that you were eating a ham sandwich as you asked your question, and say that it turns out that you were, in fact, eating a ham sandwich as you sent it. But if I am asked 'how did you know?' and I say 'because I am eating a ham sandwich as I write the reply', then we would say that this was not a justification for believing you were eating one as you wrote, and that my "knowledge" was no more than a lucky guess, or a coincidence. Knowledge can't turn out to be true just by accident – there must be a good reason for holding it.

Knowledge must primarily be based on reason and evidence, rather than feeling or intuition. Knowledge needs true belief based on evidence. Still this is not necessarily knowledge. E.g.: in ancient Greece a few people were heliocentrists. They believed that the earth revolves around the sun (which turned out to be a true belief), they had reasons for their belief, but not enough evidence to know that the earth went around the sun: at that time it seemed more evident, that the sun revolved around the earth.

It was thought that justification, when added to true belief, yields a necessary and sufficient condition for knowledge. Its sufficiency, however, was refuted by Edmund Gettier. He showed that having a justified true belief still might be insufficient for knowledge.

E.g.: Suppose that Helen, one of my sisters, tells me that she is pregnant, on the grounds that her pregnancy test at the clinic was positive. So I believe that one of my sisters is pregnant for a good reason: my belief is justified. Further suppose that my belief is true, but not because Helen is pregnant. There was a mix up at the clinic and not she is pregnant, but my other sister, Christine. My belief was true and justified, but there was no knowledge.

Then, what more than justified true belief is required for knowledge? One answer is this. A belief counts as knowledge only if it was acquired by a reliable method. A method for acquiring beliefs is reliable just if it leads one to acquire beliefs which are true and does not lead one to acquire beliefs which are false.

What, then, is knowledge? One answer is this: knowledge is true justified belief that was *acquired by a method that was reliable*. That's why some people are dissatisfied with (these variations of) the justification theory of knowledge, they say "If that's what knowledge is, then we have very little of it, if any!"

For true beliefs to count as knowledge, it is necessary that they originate in sources we have good reason to consider reliable. These are perception, introspection, memory, reason, and testimony. Let us briefly consider each of these.

Perception: Our perceptual faculties are our five senses: sight, touch, hearing, smelling, and tasting.

Introspection: Introspection is the capacity to inspect the, metaphorically speaking, "inside" of one's mind. Through introspection, one knows what mental

states one is in: whether one is thirsty, tired, excited, or depressed. It is easy to see how a perceptual seeming can go wrong: what looks like a cup of coffee on the table might be just be a clever hologram that's visually indistinguishable from an actual cup of coffee. But could it be possible that it introspectively seems to me that I have a headache when in fact I do not?

Memory: it is the capacity to retain knowledge acquired in the past. What one remembers, though, need not be a past event. It may be a present fact, such as one's telephone number, or a future event, such as the date of the next elections. Memory is, of course, fallible. One issue about memory concerns the question of what distinguishes memorial seemings from perceptual seemings or mere imagination.

Reason: Some beliefs would appear to be justified solely by the use of reason (conceptual truths, such as "All bachelors are unmarried", and truths of mathematics, geometry and logic: 12 divided by 3 is 4).

Testimony: when you ask the person next to you what time it is, and she tells you, and you thereby come to know what time it is, that's an example of coming to know something on the basis of testimony. And when you learn by reading the Washington Post that the terrorist attack in Sharm el-Sheikh of July 22, 2005 killed at least 88 people, that, too, is an example of acquiring knowledge on the basis of testimony. So we might say that testimony is a source of knowledge if and only if it comes from a reliable source.

Forms of knowledge: everyday, artistic, mythological, religious, philosophical, scientific.

Unit 14. Rationalism and empiricism. The problem of truth

Modern epistemology generally involves a debate between rationalism and empiricism, or the question of whether knowledge can be acquired *a priori* or *a posteriori*:

Empiricism: knowledge is obtained through experience.

Rationalism: knowledge can be acquired through the use of reason.

Rationalists typically emphasize the importance of *a priori* ideas and arguments in establishing genuine knowledge on a firm foundation. According to rationalism, it is possible to know things before we have had experiences — this is known as *a priori* knowledge because *priori* means before.

Empiricists, on the other hand, usually hold that all *a priori* propositions are merely analytic, so that we must rely on *a posteriori* propositions for significant information about the world. According to empiricism, we can only know things after we have had the relevant experience — this is labeled *a posteriori* knowledge because *posteriori* means “after.”

The terms *a priori* (“from the former”) and *a posteriori* (“from the latter”) are used in epistemology to distinguish two types of knowledge. *A priori* knowledge or justification is independent of experience (for example, “All bachelors are unmarried”; “ $3 + 4 = 7$ ”); *a posteriori* knowledge or justification is dependent on experience or empirical evidence (for example, “Some bachelors are very happy”; “Chicago is located on the shore of Lake Michigan”).

E.g.: an *a priori* argument is one of which “you can see that it is true just lying on your couch. You don’t have to get up off your couch and go outside and examine the way things are in the physical world. You don’t have to do any science.”

E.g.: the proposition expressed by the sentence, “George V reigned from 1910 to 1936.” This is something (if true) that one must come to know *a posteriori*, because it expresses an empirical fact unknowable by reason alone. By contrast, consider the proposition, “If George V reigned at all, then he reigned for at least a day.” This is something that one knows *a priori*, because it expresses a statement that one *can* derive by reason alone.

Truth is one of the central subjects in philosophy. It is also one of the largest. Truth is has no single definition about which a majority of professional philosophers and scholars agree, and various theories and views of truth continue to be debated.

The problem of truth is in a way easy to state: what truths are, and what (if anything) makes them true. But this simple statement masks a great deal of controversy.

Theories all attempt to directly answer the nature question: what is the nature of truth?

The correspondence theory: we believe or say is true if it corresponds to the way things actually are – to the facts. A belief is true if and only if it corresponds to a fact. a belief is true if there exists an appropriate entity – a fact – to which it corresponds. If there is no such entity, the belief is false. Facts are generally taken to be composed of particulars and properties and relations or universals, at least.

Consider, for example, the belief that Ramey sings. Let us grant that this belief is true. In what does its truth consist, according to the correspondence theory? It consists in there being a fact in the world, built from the individual Ramey, and the property of singing. Let us denote this "Ramey, Singing". This fact exists. In contrast, the world (we presume) contains no fact "Ramey, Dancing". The belief that Ramey sings stands in the relation of correspondence to the fact "Ramey, Singing", and so the belief is true. The key to truth is a relation between propositions and the world, which obtains when the world contains a fact that is structurally similar to the proposition.

The coherence theory of truth: A belief is true if and only if it is part of a coherent system of beliefs. A proposition is true if it is the content of a belief in the system, or entailed by a belief in the system.

The correspondence theory seeks to capture the intuition that truth is a content-to-world relation. It captures this in the most straightforward way, by asking for an object in the world to pair up with a true proposition. The coherence theory, in contrast, insists that truth is not a content-to-world relation at all; rather, it is a content-to-content, or belief-to-belief, relation.

The pragmatist theory: Truth is the end of inquiry. True beliefs will remain settled at the end of prolonged inquiry. Truth is all the knowledge which ensures success and practical efficiency of our activities.

A. Tarski's semantic theory of truth: sentences are the primary bearers of truth; sentences are fully interpreted sentences, having meanings. The main criteria of truth are subject adequacy and logical consistency. Subject adequacy is achieved through presentation of a situation in the form of a language, and its truth is checked by translation into a formalized metalanguage. And logical consistency can be achieved only at the metalanguage level.

One thing to emphasise is the distinction between knowledge and truth. Knowledge is something that depends on people and their beliefs, whereas truth seems to be something that does not depend on people at all, just on what really is. This is often referred to as the distinction between epistemology (what is known) and ontology (what is). Things can be true without us being able to say they are true, and we can say they are true without them being true.

What is the difference between knowledge and faith? Knowledge must have proofs. Faith has no proof.

The criteria of truth (or tests of truth) are standards and rules used to judge the accuracy of statements and claims. They are tools of verification. These criteria are: universality and necessity; evidence; logical consistency; empirical and practical confirmability.

Unit 15. Philosophy of science. Scientific method

The word *science* has its origins in the Latin verb *scire*, meaning “to know.” Although, one can “know” through tenacity, authority, faith, intuition, or science, the method of science [or the “scientific method”] is distinct in its notion of intersubjective certification. In other words, it should be possible for other investigators to ascertain the truth content of scientific explanation(s). “Scientific knowledge thus rests on the bedrock of empirical testability” (Hunt, 1991: p. 197). Empirical replication depends on a comparison of “objective” observations of different researchers studying the phenomenon.

Science is a complex socio-cultural phenomenon, which acts as: (1) a system of reliable knowledge about different spheres of reality; (2) an activity of producing such knowledge; (3) a social institute. Being a *social institute*, it implies a system of special institutions or authorities (Academies, higher education institutions, laboratories), professional groups and specialists, different forms of communication between them (scientific publications, conferences, training or probation).

Philosophy of science these days seems largely concerned with questions of method, justification and reliability – what do scientists do (and are they all doing the same thing? are they doing what they think they’re doing?), and does it work, and if so why, and what exactly does it produce? There are other issues, too, like, do scientific theories really tell us about the world, or just give us tools for making predictions (and is there a difference there?).

As science is a project whose goal is to obtain knowledge of the natural world, the philosophy of science is a discipline that deals with the system of science itself. It examines science’s structure, components, techniques, assumptions, limitations, and so forth.

The *components* of science are data, theories, and what is sometimes called shaping principles.

Data are the collections of information about physical processes.

Theories come in roughly two forms. *Phenomenological theories* are empirical generalizations of data. They merely describe the recurring processes of nature and do not refer to their causes or mechanisms. Phenomenological theories are also called scientific laws, physical laws, and natural laws. Newton’s third law is one example. It says that every action has an equal and opposite reaction.

Explanatory theories attempt to explain the observations rather than generalize them. Whereas laws are descriptions of empirical regularities, explanatory theories are conceptual constructions to explain why the data exist. For example, atomic theory explains why we see certain observations. The same could be said with DNA and relativity. Explanatory theories are particularly helpful in such cases where the entities (like atoms, DNA, and so forth) cannot be directly observed.

It is evident that theories and data by themselves are insufficient for science to work, and thus other factors are needed for science to operate. This group of factors in the nature of science is that of shaping principles, which can be used to select theories and form the foundations of science (the criteria of science).

Because of the underdetermination of theories, there is always an infinite number of competing theories that can accommodate any given set of empirical data. Since these competing theories are empirically indistinguishable from each other, if science is to pick out a theory from among these numerous competitors and claim that it is correct, then such a selection must be based on nonempirical principles (whether they be philosophical, personal, societal, or whatever). The law of parsimony is one of them. This principle of logic states that, if all other aspects are equal, the simplest theory is preferred over other theories involving additional factors. This is also called *Ockham's razor*. The law of parsimony is often used because a theory conforming to this principle fits the data more easily. This principle especially applies to theories with ad hoc (=for this case) hypotheses. The lower the number of ad hoc hypotheses a scientific theory has, the better.

Other principles include (but are not limited to) empirical adequacy (covering the pertinent data in some suitable way), self-consistency, fruitfulness (giving rise to other understandings and having stimulated pioneering investigations and advancements), and explanatory power. Another key principle is how well a theory ties in with other scientific theories and concepts that are rational to believe. It is only when these kinds of shaping principles interact with data can science then provide rational support for a theory over its competitors.

Many people want to distinguish between science and non-science (or pseudo-science), usually to disparage the latter. In the early years of science, the system of acquiring knowledge was viewed as completely objective, rational, and empirical. Apparently some sort of method was necessary because humans seemed to have a variety of tendencies and feelings that were not very trustworthy, including biases, feelings, intuitions, and so forth. These kinds of things had to be prevented from infecting science so that knowledge could be reliably obtained. Rigorous and precise procedure ("the scientific method") was to be followed so that such imperfections of humanity would not hinder the process of discovering nature.

The development of the **scientific method** has made a significant contribution to our understanding of knowledge. To be termed scientific, a method of inquiry must be based on gathering observable, empirical and measurable evidence subject to specific principles of reasoning. The scientific method consists of the collection of data through observation and experimentation, and the formulation and testing of hypotheses.

Baconian inductivism in the early seventeenth century was at one point considered to be the scientific method. The basic idea at the time was this: collect numerous observations (as much as humanly possible) being unaffected by any prior prejudice or theoretical preconceptions while gathering the data, inductively infer theories from those data (by generalizing the data into physical laws), and collect more data to modify or reject the hypothesis if needed.

The hypothetico-deductive method was conceived by Newton late in the seventeenth century. Essentially, one starts with a hypothesis (a hypothesis is basically a provisional theory) and then deduces what we would expect to find in the empirical world as a result of that hypothesis. So first, we have an idea or suggested theory (hypothesis) that we come up with for some reason or other; then, we try to

figure out what the consequences of it would be (deduction). The final stage is to test for these expectations and, by so doing, verify whether the theory is a good one or not. In this method it doesn't matter where the theory comes from, but only how well it's confirmed by experiment.

The method of falsification (Karl Popper, one of the finest and most influential philosophers of science of the twentieth century) was an attempt to avoid the problem of induction by suggesting that science could instead proceed in a deductive fashion: scientists would propose theories and then try to falsify them (i.e. show them to be wrong). Popper recognized that one could not record everything observed, because that is simply not feasible. Some sort of selection is needed, and thus observation is always selective. If a theory cannot be falsified through some conceivable observation, then such a theory is not genuine science. The necessity for a scientific theory to be conclusively falsifiable is known as the demarcation criterion. This idea seemed reasonable enough, since scientific theories can make predictions. Popperian falsification suggested that if a prediction does not come true, then the scientific theory must be false. Popper's idea of the scientific method was for scientists to test scientific theories in experiments where the outcome could potentially falsify the theory, especially in experiments where the theory would most likely collapse.

It becomes easier to understand these principles when they are put into action. In the "moon is made of cheese" example, we can reject it because of the law of parsimony. It uses an ad hoc hypothesis, whereas the theory of the moon being like a rock does not. Often times, of course, more than one shaping principle becomes applicable. For example, suppose Bob's computer is malfunctioning. One theory he has is that an invisible gremlin has caused such problems, and another is that a computer virus has invaded his machine through his modem, computer programming, and some fairly complex electronic systems in his computer as well as on the Internet. The gremlin theory is simpler, and thus it would seem to appeal to the law of parsimony. Yet the gremlin theory hardly seems empirically adequate in this case. This is because other considerations need to be taken into account. Another fact to consider here is that the computer virus theory ties in with electronic concepts that are supported by evidence, whereas the gremlin theory does not. Because so many shaping principles are used and because they can often conflict with each other, we should be careful about justifying how much the evidence supports a theory.

There is no known clear-cut method that tells us to what degree the evidence confirms a scientific theory, despite attempts at finding one. This becomes problematic when scientists must decide on what theory to accept as the most rational one. Scientists intuitively feel how rational scientific theories are, rather than having a precise logical method for such judgments. These intuitive feelings result from shaping principles. The interactions of shaping principles in the minds of scientists are so complex and so numerous that we may never come up with a rigorously logical system to select theories.

Science has many specialized fields, and scientists in those fields require certain craft skills unique in that field to conduct experiments. Such experiments do not involve precise rules that give detailed instructions on what to do at each step. What may appear to be misconduct to an outsider may actually be quite valid scientific

practice in that field. Furthermore, rapid progress in science will be more likely if scientists do not follow a single standardized method. Individual scientists have numerous ways of making theories and evaluating them, which explains why there can be disagreements among scientists. The different shaping principles that interact with data can produce different results with each scientific worker, including on how scientists should approach things. Sometimes these disconformities help to produce useful scientific revolutions. At times revolutions in science happen in large part because these kinds of shaping principles that are accepted by the majority change over time. Great changes in shaping principles create another reason why there has never been a single scientific method used by all scientists.

What are then the *criteria of a science* (scientific theory)?

- It makes testable predictions.
- It predicts new facts.
- It unifies already existing ideas.
- It is logically consistent (consistent with what we already know).
- It is systematic.
- It can be empirically proved.
- It is falsifiable.
- It is simple.

A scientific theory is empirical, and is always open to falsification if new evidence is presented. Even the most basic and fundamental theories may turn out to be imperfect if new observations are inconsistent with them. Critical to this process is making every relevant aspect of research publicly available, which allows ongoing review and repeating of experiments and observations by multiple researchers operating independently of one another. Only by fulfilling these expectations can it be determined how reliable the experimental results are for potential use by others.

One great strength of science is that it's self-correcting, because scientists readily abandon theories when they are shown to be irrational.

It does seem that science contains various imperfections and some serious limitations on certainty. Many have pointed out the existence of technology as a sign that we are on the right track. But just because technology works doesn't necessarily mean that our theories of why it works are correct. Often, the reliability of technology depends more upon empirical regularities, rather than explanatory concepts. For example, candles and light bulbs have worked and will continue to work even though our theories of why they work have changed over time (light as particles, waves, or some combination of the two; the rejection of the phlogiston theory of heat, etc.). The underdetermination of theories applies to explaining the effectiveness of technology just like any other data. Some have believed that science has been successful in acquiring knowledge, yet there really is no way of verifying this. Data are incapable of conclusively proving theories, and we can't exactly read an omniscient "book of truth" to see how often our theories have been correct. Historically speaking, almost every theory in science eventually becomes discarded as wrong. Consequently, there have been so many false starts in science that it would be rather incredible if we were the ones who are finally on the right track. It would be especially amazing considering that the theories that we've already discarded have not even been

conclusively falsified by the data. Even so, this is not to say science isn't worth having around. On the contrary, science provides significant benefits for humanity. For one thing, science has helped us to alleviate the struggle to survive. Whether or not we are on the right track, it seems clear that science is conducive for useful technology. Various aspects of science can be used for the needs of people, understanding ourselves and even our place in the universe. Although there is a very real possibility of being wrong, we can increase our chances of being right through further accumulation of data. Despite all its imperfections and limitations, science may very well be the best tool we have for discovering nature.

Unit 16. Scientific knowledge

The structure of scientific knowledge can be presented in the following levels: empirical and theoretical. These levels are interrelated and are characterized by their own methods.

The main methods at the *empirical level* are observation, experiment, comparison, description. And the form of scientific knowledge at this level is a fact or experimental law.

At the *theoretical level* we apply methods of analysis, synthesis, deduction, analogy.

Forms of scientific knowledge (at the theoretical level). Based on observations of a phenomenon, a scientist may define a *problem*. This is a question, the answer to which is not found yet. As empirical evidence is gathered, a scientist can suggest a *hypothesis* to explain the phenomenon. This description can be used to make predictions that are testable by experiment or observation using scientific method. When a hypothesis proves unsatisfactory, it is either modified or discarded.

While performing experiments, scientists may have a preference for one outcome over another, and it is important to ensure that this tendency does not bias their interpretation. A strict following of a scientific method attempts to minimize the influence of a scientist's bias on the outcome of an experiment. This can be achieved by correct experimental design, and a thorough peer review of the experimental results as well as conclusions of a study. After the results of an experiment are announced or published, it is normal practice for independent researchers to double-check how the research was performed, and to follow up by performing similar experiments to determine how dependable the results might be.

Once a hypothesis has survived testing, it may become adopted into the framework of a scientific *theory*. This is a logically reasoned, self-consistent model or framework for describing the behaviour of certain natural phenomena. A theory typically describes the behaviour of much broader sets of phenomena than a hypothesis – commonly, a large number of hypotheses can be logically bound together by a single theory. These broader theories may be then repeatedly tested by analyzing how the collected evidence (facts) compares to the theory. When a theory survives a sufficiently large number of empirical observations, it then becomes a scientific generalization that can be taken as fully verified.

Scientific knowledge develops through constant revelation and resolving contradictions, which serve as the source of its growth. Any scientific problem is a contradiction – discrepancy between theory and facts, or a conflict between different theories, or a paradox, hiding inside a theory. The bigger discrepancy, the more intensively it makes scientific thought work.

Every contradiction must be somehow resolved. If the contradiction emerged as a result of some mistake in argument, it can be and must be got rid of, taking into consideration the laws of logic, and the mistake must be corrected. If there is no mistake, then such a contradiction is an objective one, and we should look for means of resolving it in reality itself, by research and analysis of real facts. Thus scientific knowledge grows through resolving the ambiguous nature of contradictions.

In the era of industrialization we faced the problem of negative (harmful) influence of man's technogenic activity, which is determined by the growing scientific knowledge. That is why philosophy, and to be more correct ethics of science, is to resolve the present-day contradiction between the necessity of continuous growth of scientific knowledge and its limitations in some spheres, potentially dangerous for man's existence and health (e.g. gene engineering). The key issue here is unequal growth of knowledge: technical knowledge progresses and accumulates much faster than humanitarian knowledge (the latter is often pushed aside on the periphery of culture). Technics gets control over the social life and masters it in the prejudice of the main interest of society – harmonious, versatile development of man's personality.

It is worth mentioning that the history of science is unsteady. At times *scientific revolutions* take place, which means radical reconsideration of commonly accepted views of the object of science. Scientific revolutions at short notice significantly broaden our ken of the given object. And this is done not only by simple accumulation of ideas, but making corrections of what was considered correct.

As the result of a scientific revolution scientific methods undergo significant changes. The totality of these methods is called the type of rationality. Each major era in the history of science has its type of rationality, which is called 'paradigm' (from Greek 'example, sample'). Each new paradigm does not simply follow the one prior to it, but also borrows and inherits all the richness of the ideas, made in the framework of the former paradigm. The new paradigm fundamentally deepens the theoretical understanding of the world and provides scientists with much more powerful methods of exploring the object of the given science.

Science and technics. The term 'technics' derived from the Greek 'techne' (ability, art, profession, craft, means, method) and inherited its ambiguous meaning. Firstly, it implies all possible means and tools of human activity. Secondly, methods and schemes of this activity (technique of writing, craft etc.), which are often called "technologies".

The history of technics is divided into several stages: (1) domination of instruments of hand-labour; (2) emergence of machines; (3) use of automata. Present-day technics are a product of science, which plays the leading role towards it, and it finds its expression in the phenomenon "scientific and technological revolution".

Technics development was strongly influenced by society, which according to man's urgent needs completes an 'order' for a certain technical product or technology to facilitate work, to improve comfort, to ensure people's health and safety. In its turn technics influences society: military technics of the 20th century, connected with development of mass destruction weapon, changed the character and form of policy. Or inventing radio, motion picture, television affected emergence of new arts, and influenced culture in general.

However today the idea of scientific and technological progress is no longer viewed positively: philosophers point at the destructive power of technics.

Unit 17. Global problems of mankind

One cannot ignore the profound contradictions of world phenomena and processes. Human genius has achieved unusual heights in penetrating the mysteries of nature and man. It is now probing the depths of the macro- and micro-worlds, achieving new heights in human culture and the all-embracing scientific and technological progress, and scoring triumphs in combating diseases and extending the human life span.

Before the 20th century the humanity at large lived and developed without questioning its immortality. States, individual peoples or cultures could perish in clashes, conflicts and wars, but the entire humanity would remain and evolve. Now we are facing a paradoxical situation when arms and technological build-up led to such a state when the humankind far from implementing its initial claims for the total supremacy over circumstances, on the contrary fell in the grips of circumstances, became a hostage of weapons of mass destruction made by the humankind itself. Thus, at the second half of the 20th century the humanity confronted the problem of survival when scientific and technological progress creates more opportunities for development of new weapons of mass destruction. This is only one among the major problems generated by the technogenic civilization, the problems that put in jeopardy the fundamentals of human existence.

The second, by no means less important problem, is aggravation at the end of the 20th century of the global ecological crisis. The old paradigm according to which nature is unfathomable reservoir of resources for human activity proved false. Crucial environmental issues concern ozone depletion, global warming, species extinction, marine habitat destruction and deforestation to name just a few. Overwhelming scientific evidence points to human activities as the primary cause of all of these problems.

Finally, the third (by order, not by importance) problem, that of alienation, to be more accurate, the problem of maintaining individuality, of sustaining man as a biosocial entity in the environment of on-going processes of alienation. Making his world more complicated man impels powers that are no longer subordinate to him. In his further effort to transform the world he produces social factors that radically change his life and eventually worsen it.

In the late 1960s the Frankfurt school stated the emergence of a one-dimensional man, a product of mass culture as a consequence of modern technogenic development. Contemporary industrial culture creates wide opportunities for manipulation of consciousness when an individual loses ability to rationally comprehend the reality. In this case both the manipulated and manipulators become hostages of mass culture, turning into characters from an enormous puppet theater where the phantoms produced by man's imagination reign supreme.

Enhanced development of technogenic civilization makes socialization and shaping of an individual a rather complicated problem. The permanently changing world cuts short many traditions and roots urging an individual to get accustomed simultaneously to different cultures and circumstances. Sporadic human bondages, on

the one hand, bring all individuals together in a single human entity, but, on the other hand, isolate and detach them.

Modern facilities offer an opportunity to communicate with people living on all continents. One can talk with his colleagues all around the world by telephone, learn by TV what is going on at the farthest corners of the Earth, but at the same time be unfamiliar with his next-door dwellers. This is an interesting phenomenon when growing separation and world globalization go in parallel. Telecommunication gives the illusion of on-going communication but without preserving important elements such as direct human contact, replete with smells, noises, body language and facial expressions. Telecommunication reduces communication to the exchange of verbal or written information, the bare skeleton of any exchange.

The problem of maintenance of individuality acquires today a new dimension. For the first time in history a real threat emerged of ruining the biogenetic basis which serves as a prerequisite for an individual's being and development and which, under the process of socialization, blends various programmes of social behaviour and moral values generated in culture.

As a conclusion from what was said above, we can define global problems as the problems that emerge as the result of a powerful development of productive forces in conditions of the scientific and technological revolution and achievement of such dimensions of production when the balance between society and nature is threatened. And the existence of the civilization depends on solving such problems.

Global problems of mankind are interconnected and form an integral system. They can be divided into several groups.

(1) Sharing our planet:

- Global warming
- Biodiversity and ecosystem losses
- Fisheries depletion
- Deforestation
- Water deficits
- Maritime safety and pollution

(2) Sharing our humanity:

- Massive step-up in the fight against poverty
- Peacekeeping, conflict prevention, combating terrorism
- Global infectious diseases
- Natural disaster prevention and mitigation

(3) Sharing our rule book:

- Reinventing taxation for the twenty-first century
- Biotechnology rules
- Global financial architecture
- Illegal drugs
- Trade, investment, and competition rules
- Intellectual property rights
- E-commerce rules
- International labour and migration rules

Unit 18. Future of mankind

The modern human civilization has reached a critical stage of its development. The sweeping changes in the field of technique and technology, the advancement of science and research transform radically the physical world that provides the framework and immediate milieu of man's vital activity, giving rise to entirely new forms of labour cooperation among the people, new types of communication and information storage and transmission, as well as new linkages and relationships within human communities and new forms of interaction of cultural traditions.

In the middle of the 20th century, when society realized the destructive character of technological progress in the field of arms, scientists started thinking about future and the scenarios of future. At the end of the 1960s an international organization "the Club of Rome" was founded, aiming at discussing and motivating research of global problems that emerged due to the scientific and technological revolution and are threatening to future existence of man.

According to "the Club of Rome", "a world consciousness must be developed through which every individual realizes his role as a member of the world community... A new ethic in the use of material resources must be developed which will result in a style of life compatible with the oncoming age of scarcity... One should be proud of saving and conserving rather than of spending and discarding. An attitude toward nature must be developed based on harmony rather than conquest. Only in this way can man apply in practice what is already accepted in theory – that is, that man is an integral part of nature... If the human species is to survive, man must develop a sense of identification with future generations and be ready to trade benefits to the next generations for the benefits to himself." (<http://green-agenda.com/turningpoint.html>)

Different aspects of future of mankind and problems in connection with it are dealt with in futurology and social forecasting. Scenarios of future are based on analysis of the tendencies of past and present-day development. That is why each scenario should start at the analysis of the civilization development.

We can speak of two major types of civilization in the history of mankind: traditional societies and a technogenic civilization.

The traditional societies are characterized by extremely stable and deep-rooted conservative tendencies of the reproduction of social relations and a corresponding way of life. Of course, these societies are also subject to change: there are innovations in the spheres of production and regulation of social relations, but the progress related to the accumulation of human achievements is a very slow process as compared with the life span of human individuals and generations. The traditional societies may survive a change of several generations, which live within approximately the same patterns of social life, reproducing and passing from one generation to the subsequent one. Various types of human activity, their objectives and the means they employ may exist as stable stereotypes for hundred years. Accordingly, the cultures of these societies will attach priority to the existing traditions, models and standards which accumulate the experience of the ancestors or canonized styles of thinking, so to say. Innovative activities are by no means regarded

as the highest value. On the contrary, it exists within certain limits and is allowed only within the framework of established and century-long traditions. Ancient India, China and Egypt, mediaeval caliphates are the graphic examples of traditional societies. This type of social organization has survived into modern times: many countries of the Third World have kept some features of traditional society, although their collision with the modern Western (technogenic) civilization sooner or later leads to radical transformation of the traditional culture and the way of life.

The other type of society, which is usually described by the vague term “Western civilization”, is a peculiar type of the social development and society, which had initially originated in the European region due to a series of mutations of cultural traditions and then expanded throughout the world. This is technogenic civilization. Once developed into a relatively mature structure, it gained a tremendous momentum of social changes. One can say that the extensive development of history thus gave way to an intensive type of social advancement, as it were. Spatial existence was replaced with a temporal one. The potentials of growth are now derived from the restructuring of the very foundations of the previous modes of man's vital activity and the formation of entirely new opportunities, rather than from the expansion of cultural zones. The key and truly epoch-making transformation of world-wide historic importance, which is related to the transition from traditional society to the technogenic civilization, lies in the emergence of a new value system. Innovation, originality or something new in general are regarded as values. One can even say that The Guinness Book of Records is a symbol of our technogenic society, as it were. Unlike the Seven Wonders of the ancient world, the Guinness Book gives a graphic proof that every individual can become unique and achieve something extraordinary. Moreover, it invites people to seek these objectives. The Seven Wonders, on the contrary, were aimed at emphasizing the completeness of the world and showing the people that all grandiose and truly spectacular projects had been accomplished by the previous generations. Further, one of the highest grades on the values scale is now accorded to the autonomy of personality, which was very untypical of traditional society. The traditional societies in general allowed self-realization of human personality exclusively through its affiliation with a definite corporation in which a human being was regarded as a link in a rigidly organized system of corporate ties. Any man who did not belong to a corporation was treated as a non-personality, as it were.

The technogenic civilization gives rise to a peculiar type of the autonomy of personality: a man can change his corporate ties, he is not bound by them any longer, and he is able and allowed to be flexible in his relations with other people, submerging into various social communities and often different cultural traditions.

The values of the technogenic culture give an entirely different vector of human activity; man's transforming activity is regarded as the main purpose of human existence.

The understanding of the activity and predestination of man is closely linked to the second important aspect of the value and outlook orientations, which is typical of the culture of the technogenic world – i.e., the understanding of the nature as an ordered and logical field in which an intelligent being, who knows natural laws, is

capable of establishing its power over the external processes and objects and put them under control. This understanding implies that the nature is an unlimited treasury of natural resources available to man.

The third equally important aspect of the value orientations of technogenic society lies in its high priority attached to the values of power, control and domination over the natural and social circumstances. The enthusiasm for the transformation of the world generated a peculiar attitude towards the ideas of the domination of force and power. The traditional cultures understood these ideas above all as the immediate power of one man over other people. Ancient patriarchal societies and Asian despots were known to possess unlimited powers with respect to their subjects. Moreover, male members of these societies (i.e. family heads) had similar power and authority with respect to their wives and children who were their subjects, body and soul alike. The traditional cultures did not know the autonomy of personality or the ideas of human rights.

The technogenic world offers numerous situations in which control and domination are executed as a force of direct and immediate suppression and power of one man over another. However, the relations of personal dependence in the technogenic world cease to dominate and become subordinate to new social relationships of material dependence. The essence of these relations is determined by an overall exchange of the results of human activity in the form of goods.

In the 1970s developed countries made a scientific and technological revolution, which determined change to the postindustrial information society (information technogenic society), based on free information exchange using computer networks. Entering the postindustrial stage the technogenic civilization began a new cycle of its expansion to other countries. Science, education, technological progress and expanding market give rise to a new way of thinking and living. But it is common knowledge that the technogenic civilization led mankind to global crisis: ecological crisis, anthropological crisis, new means of mass destruction – these are all byproducts of the technogenic development.

Overcoming global crisis can become a beginning of change to the new type of civilization development. There are two opposite views on the essence of the postindustrial civilization: (1) it is a simple continuation, a special stage of the technogenic development, when new values are not introduced, only some alterations are made in relation to new technologies; (2) it is not a simple continuation of the technogenic civilization, it can be interpreted as the beginning of a new historically third type of civilization development. But philosophers believe that the formation of the postindustrial civilization should have a connection not only with the technological revolution, but also with spiritual reformation, critical reconsideration of former basic values of the technogenic culture.

Thus entering the new stage in the civilization development, what are the possible scenarios of the future of mankind?

Scenario 1. Globalization will lead to emergence of one universal civilization, where there will be no place for nations and cultural diversity. Such a civilization will be headed by the world government, and unification will be carried out in the form of westernization of the whole world. Inequality will remain, and the global world will

still consist of several worlds – a small “global elite” (developed countries) and underdeveloped countries. We can see that there is ground to think of such a future: today the center and the leader of globalization is the West, and western living standards, mass culture, western model of economical and political development are spread over the world.

Scenario 2. S. Huntington’s prediction of a clash of civilizations is a realism-inspired paradigm where the primary actors are unified blocks of states whose quest for security and dominance is centred on the promotion of their competing cultures. Huntington outlines a future where the great divisions among humankind and the dominating source of conflict will be cultural. He predicts conflict occurring between states from different civilizations for control of international institutions and for economic and military power. He views this mix of conflict as normal by asserting that nation-states are new phenomena in a world dominated for most of its history by conflicts between civilizations.

Scenario 3. More optimistic sounds the theory of multipolar global world, which represents a complex system containing not one, but many centres connected with each other by network relations (those based not on supremacy and subordination, but on equality, mutual interest of participants). These centres beside the West are said to include China, Japan, India, Russia. Most scientists suppose that global processes will not lead to uniformity: in all countries they all get adjusted to the local conditions and cultural traditions, change under their influence (such a process is sometimes referred to as glocalization – globalization and localization).

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