

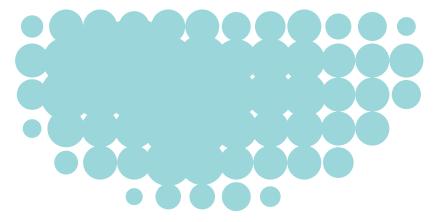
Cognitive Anthropology: Selected Issues



Jana Trajtelová Edition Cognitive Studies fftu



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Preface

Every *anthropos* is at the same time an anthropologist (Landmann, 1982, p. 10). Michael Landmann, a Swiss anthropologist, who is concerned with philosophical reflection of culture and philosophical anthropology, proposed a profound truth of a staying power in this thought. Man is a mystery to himself. As such, he is a being searching knowledge, he is a "philosophical" being, and he can awe upon his own being and question his own origin and purpose. He searches and discovers a meaning of things and affairs around him with passion, as well as meaning of his own existence. As a playful and curious being he desires to comprehend his own place in nature, his own history, his abilities and (nearly) endless possibilities. And finally, as a creative being and a being "open to the world", free from immediate bonds of nature, as a being "virtually eternal" (Coreth, 1994, p. 118), he cannot find complete satisfaction in any of his answers.

It is possible to approach the key question, "What is man?", from many access paths. Max Scheler discerns three basic perspectives of self–comprehension of a Western man: philosophical, theological and scientific (Scheler, 1968, p. 44). Of course, a possibility of more specialized attitude and narrow angle of vision in these perspectives is always facultative. There could be found a large number of definitions of "man" in the field of natural and social sciences. These always mirror a particular aspect of human (e.g. biological, political or cultural.)

The presented study text offers one of the perspectives: focuses on man as a thinking and interactive social being. The subject of

the book is not only **the nature of culture** but also comprehension of human being as someone who constantly reshapes and creatively influences his own living space by his cognition and his action. Herein, a complex issue of relation between culture and an individual is being opened, or else a question of — to what extent does culture influence an individual perception of reality? **Cognitive anthropology** draws our attention to correlations between specifically human **thought**, perception, cognition and human environment, which is for *homo sapiens* always a **cultural** environment. Cognitive anthropology explores man as a producer and a product of culture, who carries his particularity — the culture — so to say "in himself".

This course book is not aiming at a systematic or chronological study of the discipline, knowing that the content of this work cannot cover the whole affluent scope of the area under discussion. This study text is more of a **selection of topics and issues** present in cognitive anthropology and is intended to serve as an **introduction** to the particularity of the subject and an overview of significant **contextual correlations**. Our endeavour is aimed at introducing basic character of the discipline by clarifying its place within the other close specialized disciplines and its relation to them. A summary of basic themes with an introduction of renowned scholars and methodological procedures is provided, including some of the representative contemporary issues.

By way of introduction, we would like to emphasise some motives, which led to the composition of this text. This course book is formed in relation to the university course on philosophical reflexions of anthropological investigation in the first half of the 20th C (so called Philosophical Anthropology). This is a philosophical school where philosophers, as they were trying to grasp a particularity of man along with distinguishing him from other animals, began to consider seriously **phenomenon of culture**. They identified culture as a specific sign of human existence and as a tangible expression of unique human mental and physical activity.

This course book provides our students with a supplementary, more focused and in some respect much more specific view on anthropological issues. Likewise, we would like to enrich established philosophical theories with encountering man, who is always already embedded in his unique cultural environment; to enrich the theories with typical anthropological themes based on actual culturally-anthropological field research, its processing and results. This university course material arouse from a need to supplement the traditional philosophical reflection on man with relevant contemporary issues involving epistemological questions and issues of cultural "nature" of man — in perspective of confrontation of Western thought with a great variety of different cultures. The primary purpose of this text is to introduce the subject as additional study material for students in various fields of human sciences. And naturally, it is intended to serve to anyone who is keen to broaden interdisciplinary awareness and get acquainted with the approach of cognitive anthropology to issues of culture and knowledge. The goal of the offered selection of issues in cognitive anthropology is to unwrap, clarify and make accessible some of the important themes and to inspire to further study of the field.

An excellent systematic work *The Development of Cognitive Anthropology* written by the distinguished contemporary proponent of cognitive anthropology **R. D'Andrade** was a significant point of departure and companion to our survey of the field (D'Andrade, 2003). D'Andrade makes clear synthesis and classifies findings and issues of cognitive anthropology. Therefore, his work serves as a fundamental study source for this discipline.

1. Cognitive Anthropology in a Wider Context Regarding Methodology and Themes

cognitive anthropology — cognitive system — bio–cultural organism — cultural evolution — cognitive revolution

1.1 What is Cognitive Anthropology?

According to D'Andrade's definition of the discipline, general nature of cognitive anthropology is in "the study of the relation between human society and human thought" (D'Andrade, 2003). A cognitive anthropologist wants to comprehend how people from various societies make use of their knowledge in their everyday life, in what way they organize this knowledge, how they pass it on and maintain it, and how they conventionalize this knowledge as it is becoming a part of a cultural tradition. **Culture** is the key term of cognitive anthropology. The knowledge (lat. cognition) we have — whether conscious or not — is always a **cultural knowl**edge. This knowledge is present in thoughts, words or objects; it is learnt, acquired, preserved and shared within a certain social community. No experience, even the most intimate one, is acquired in absolute isolation. On contrary, its articulation is always based on a wider cultural cognitive context. Cognitive anthropology explores cultural systems of thought and describes knowledge patterns of a particular cultural reality. Cognitive anthropologists share a common basic presumption that culture is pre-existent more in people's mind than "objectively" in itself. To clarify this, in the field of cognitive anthropology, culture is defined as a kind of knowledge or as a system of ideas (Soukup, 2005). The goal of cognitive anthropology is in explaining signs, structures and nature of socially acquired knowledge; and in interpreting particular cultural forms. Despite the fact, that the studies of cognitive anthropologists have a considerably extensive scope, their common interest is in complex cognitive systems — wide range of cognitive processes, where sensory perception and description is at one end of the continuum and at the other one is conceptualization and interpretation of phenomena in natural and socio-cultural reality. (Soukup, 2005, p. 518). These cognitive systems are shared in society and have their own specific structure and manifestation, they are recognized, learnt and pass on within a particular community. In other words, cognitive anthropologists investigate forms and nature of noetic patterns of particular cultural community; they inquire about how these noetic patterns emerge and how they determine or influence the interpretation of social experience and social behaviour of individuals (Soukup, 2005, p. 518). The foremost scholars of cognitive anthropology are Ward Goodenough (*1919), Floyd Lounsbury (1914-1998), Anthony Wallace (*1923), Charles Frake (*1930), Harold Conklin (*1926), today mainly Roy D'Andrade (*1931), A. Kimball Romney (*1925), Bradd Shore (*1945), but also Naomi Quinn or Dorothy Holland. The beginnings of cognitive-anthropological approach are traceable to the founders of cultural anthropology.

Earlier, F. Boas (1858–1942) had emphasised that various nations have different perceptions of world, consequently this was stimulating of scientific interest about indigenous categories and classifications. Right from the beginning, cultural anthropology generated questions about nature and forms of human cognition and systematization of the knowledge. However, as an autonomous field of research, cognitive anthropology is rather a new anthropological discipline having appeared in late 50s of the last century. Since then, it has undergone several thematical and methodological shifts (e.g. under influence of linguistics and

structuralism, behaviourism or cognitive science) resulting in an interdisciplinary character of the discipline. Cognitive anthropology encompasses a wide range of themes from the traditional ones as the research of terminology of kinships, componential analysis, folk taxonomy, and reaching to contemporary research including cultural models and theories, cognitive processes and issue of personality, research of emotions, memory, internalization processes, motivation and many others. Some of these topics will be developed further in the following chapters. Cognitive anthropology is positioned among wider anthropological, scientific and sociological investigations with a special attention to human knowledge in the cultural context. It is not possible to access this discipline without wider understanding of methodological and thematical context which gave it a birth and conditions for work. The character and history of the discipline is, as mentioned already, a part of older and broader "story" of anthropology. Considering the goals of this text, we believe that such exposition will help to understand the themes, methodological processes and the overall character of the discipline, as well as its place and importance within anthropological and philosophical expounding of the question on human being. Therefore, the following pages present individual disciplines focusing on their importance and relation to cognitive anthropology. Their direct influence and interweaving is inseparable element of cognitive anthropology.

1.2 Anthropology: What does it mean to be human?

Anthropology, emerging towards the end of the 19th century, is concerned with exploring human nature, human society and the distant past (Lavenda, Schlutz, 2008). A possible translation of Greek expressions *anthropos* and *logos* is *man* and *reason* (also *word* or *explanation*). Put in a simplified and traditional definition: Anthropology is a **science about human.** The broadest question posed, aptly depicting the discipline, is "What does it mean to be human?".

Anthropologists seek to answer this question in an extensive area of scientific anthropological disciplines and their sub-disciplines. The broad scale of anthropology can be illustrated, for example, on a manner of classification of anthropological sciences in the U.S.A.. There are four main scientific disciplines which belong to anthropology: archaeology, anthropological linguistics, biological (or physical) anthropology and cultural anthropology (or ethnology). Anthropology is classified as a social science, which extends to natural sciences as well as to traditional human sciences. At many universities and scientific institutes all over the world, all the mentioned areas form standardised and stable pillars of anthropological investigations. However, in Europe, this kind of classification is not used commonly. At the European universities, these disciplines are presented more as independent scientific disciplines. There is a prevailing tendency to maintain the traditional classification of knowledge and science according to natural and sociological streams that uphold to their own thematical range and methods. Besides that the linguistics has gradually gained its importance within anthropology. An in-depth linguistic research has supported disclosure of many historical relations and associations between various social groups and even between cultures. Today, it is necessary to include so called applied anthropology into anthropological disciplines as well. This discipline makes use of anthropological knowledge in practical situations when resolving intercultural issues, for example in the area of health care or economic development but also in various ecological or anti-discriminating activities.

It is also possible to define anthropology as comprehensive and synthesising science a human exploring his biological and cultural nature. While reflecting on a human, natural and cultural dimensions are intertwined, whereas both of them characterise human being essentially — this has been present already in myths, literature and philosophy a long time before the emergence of scientific portrait of the world. Therefore, anthropologists talk about the

human as a two–dimensional being, as a bio–cultural creature, who yields to the law of nature as well as to patterns and cultural influence (Soukup, 2005). The term **bio–cultural organism** signifies an organism, which is characterized by both factors — biological and cultural. It is used as an operational anthropological definition of a human (Lavenda, Schlutz, 2008, p. 4).

Biological anthropologists are focused on human beings as living organisms among other living organisms and they are concerned with their place and particularity within living nature. Physical or biological anthropology encompasses such research as paleoanthropology (examination of fossil remains of human progenitors), investigations of human biological structure and its variations, and also primatology. Currently, the specialised research of molecular anthropology and neuro-anthropology is coming to the fore. In its focus is the exploration of brain development and neurological adaptations to environment. Furthermore, the emergence of anthropology is closely connected to uncovering of human "prehistory", which means that anthropological research was supported from its beginnings by archaeology (especially when discovering prehistory of humans and early history starting with first hominids from millions years ago). Biological anthropology is associated with such names as Paul Pierre Broca (1824-1880), Aleš Hrdlička (1869–1943) — by origin Czech anthropologist, Rudolf Martin (1864-1925) or Eugéne Dubois (1858-1940). The scheme of comparative cognitive anthropology is interesting, in particular with regard to our subject, as it integrates themes methods of biological anthropology into standard cognitive-anthropological themes. An interdisciplinary research team including psychologists, biologists and anthropologists works under the leadership of Daniel Haun at the Max Planck Institute. (The team cooperates with the Institute of Max Planck in psycholinguistics and in evolutionary anthropology. Cf.: http://www.mpi.nl/research/researchprojects/comparative-cognitive-anthropology; 10.8.2012). Their goal is to observe relations between the signs of human cultural

variants and the diverse cognitive functions, and between the variants of social human behaviour and the animal behaviour. Traditional observation techniques are employed in combination with experimental inter–species, inter–cultural and inter–generational examinations. The team is concerned with more areas, for example with manifestations of social life of humans and primates; with social communication and cooperation; with the issue of motivation, ways of learning and passing on knowledge; with determining how a particular social environment of a group influences cooperation and acquisition of knowledge; and with social bonds. Other significant subjects are also emotions and memory.

It was mentioned that along with the biological evolution which is inherent to all living organism, the human kind bears a specific and unique type of evolution — the cultural evolution. The traditional concept of cultural evolution is associated with the idea of development of cultures from simple forms to complex forms which also develop technologically and conceptually. The British anthropologist Sir Edward B. Tylor (1832-1917) supported the theory of cultural stages of development where he purported an overall cultural evolution of the humanity. Partly influenced by contemporary Darwinism, he defended a concept of progressive development from primitive to modern and civilized forms of society. He distinguished three basic stages of the cultural development: savagery, barbarism, and civilization. A higher stage is always developed out of a lower stage, thus the less-complex cultural forms should outlive and remain within a more developed culture and be a vestige and an evidence of general cultural development. One of his most significant works is Primitive Culture (1871). The American ethnologist, Lewis H. Morgan (1818–1881) was thinking in similar way. In his Ancient Society [1877], he identified seven developmental stages of evolution: lower, middle, and upper savagery; lower, middle, and upper barbarism; and civilization. Morgan is known also for establishing the study of kinship systems. Usually, there are two main types of cultural evolution being distinguished.

So called **unilinear** theory describes cultural evolution as an overall cultural development of humanity that proceeds only in one way direction (from savagery to developed civilizations). On the other hand, the **multilinear** theory emphasises a unique autonomous development of particular cultures and highlights rather parallel development of more cultural developmental directions (Soukup, 2011, p. 691).

Unilinearism was under several waves of criticism and the theory was rebuked for implicit ethnocentrism or even a support of racism. Possibly the most famous reaction was the theory of cultural particularism, which underlined uniqueness of cultures in space and time. Leader of this critical wave was American anthropologist of German origin Franz Boas (1858–1942) and there were many other proponents among distinguished scholars of cultural anthropology such as Leslie A. White (1900-1975) and Julian H. Steward (1902–1972) who rejected the simplified concept of universal unilinear theory of evolution of the humanity as well as the concept which claims that every culture is in its own development necessarily progressing in the same developmental process (inevitably undergoing the same developmental stages). Although a number of various paths and styles of cultural development is put forward, the progressive development of human society was not refused, especially the one including the significant mechanism of technological aspect facilitating the development of societies. A corresponding chapter will present also the concern of philosophical anthropology for the connection between culture and technology (Eriksen, 2008).

1.3 Anthropology and Cognitive Science

Cognitive concerns were inherent to cultural anthropology long time before, so called, cognitive revolution — as far as the basic concentration of attention is on the conceptual and mental aspects of studied cultures, that is on the aspect of knowledge within

a context of a culture. Cognitive anthropology is characterized by an endeavour to render schematically structures and processes of cultural knowledge; in other words, to denote outer reality as it is present in schematic and less—complex form in our mind.

Nowadays, cognitive science represents especially notable asset to cognitive anthropology. Cognitive science is "a scientific examination of cognition compliant with the methods of the six following disciplines: philosophy, psychology, linguistics, computer science, neuroscience and anthropology" (Harnish, 2009, p. 13). The mission of cognitive science is to answer epistemological questions such as nature and elements of knowledge, its source, development and application (Gardner, 1985, p. 6). The narrow definitions of cognitive science are associated, above all, with description of mental states and of thinking in terms of computer processing and representative structures of a mind (Gáliková, 2009, p. 13). Major thematical and methodological shifts occurred with criticism and decline of strict behaviourism not only in the field of psychology (cognitive psychology), which are not accidentally connected to the emergence of computers and the advancement in information technology. The growing influence of cognitive research had the main impact on psychology. It was mainly psychology, artificial intelligence, linguistics, anthropology and neuroscience that felt the impact of the growing influence of cognitive research. Cognitive scientists, as mentioned by S. Gáliková, attempted to demystify nature and functions of cognitive states of the human mind (perception, attention, memory, emotions, thinking etc.). Computers became schematic and simplified examples of possible functioning of the human cognitive processes. Initial assumption is parallel with operation of the computers: Computer transforms an input data into output data by means of a complex internal process. Mental processes and structures are transcribed into the language of information technology and are viewed in a simplified prism of computation or processing of data. The research of artificial intelligence brought into the concept of mind functioning more complex

algorithms, which can simulate some of the intelligent human actions (game of chess, comprehension of natural speech etc.).

There are two basic models which stimulate cognitive processing of human mind. The procedural model (symbolic) is based on the presumption that a human mind is functioning as some kind of biological processor. Essential entities of the cognitive processes are symbols. The symbolic model is based on a simple concept of transformation of input symbols by means of the formal rules (e.g. if → then) into output symbols. Mental processes are represented as structures and sequences of symbols and "they are composed of manipulation of representations according to symbolic algorithms and rules." (Gáliková, 2009, p. 21). The connectionist model (subsymbolic) represents an alternative to procedural model. Human brain is presented as neural network with a series of interconnected processing units (neurons) where each of them has a corresponding symbol or a structure of symbols. Moreover, there is a distinction between hardware (sometimes identified with brain) and software (mind) or computer and its applications in parallel computers with sequencing. Currently, the generally favoured concept of brain, supported by neuroscience, is the one in which the brain functions as a parallel distributive computer that contains milliards of neurons (as basic processors) interconnected like a complex neural network. Apart from the two presented models there are also "hybrid models", which combine the symbolic and the connectionist model of processing data (the symbolic-connectionist model).

At present, the specific approach of cognitive anthropology lies in the close examination of issues and topics of cultural and social anthropology employing the methods and theories of cognitive science (e.g. experimental psychology, evolutionary biology, or the research of artificial intelligence). It concentrates on, for example, the research of cognitive systems and the models of human perception and thinking in various cultural communities. With regard to relevancy of application of cognitive approach, Roy D'Andrade

believes that human beings are like opportunistic information processors that during construction of symbolic systems utilize any kind of structure that will help them to communicate concerning information (D'Andrade, 1990, p.804).

Another distinguished proponent of cooperation between cultural anthropology and cognitive science Brad Shore asserts that human brain is a permanent generator of models. Thus, presently, the cognitive examination of relation between cultural models and mind is an important component of cognitive anthropology (Shore, 1996, p. 16). In cognitive anthropology, both paradigmatical models of cognitive processing which simulate human cognition are being considered. Both approaches are applied in various forms in the anthropological research of culture, where the connectionist approach and the combining approach prove to be more appropriate (D'Andrade, 2003). Recalling the project of Strauss and Quinn, who employed the prototypical connectionist model of cognition in developing the theory of cultural meaning, we can see how they, based on this model, demonstrate that the human cognition is composed of data inscribed in the mind (cultural models), which are in perpetual interaction with the external world. The fundamental elements of the model are units that are activated in the mind by stimuli from the external world. Processing of such information is happening in series and in parallels (Blount, 2002, p. 83).

Recommended literature

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2. Questioning Cognition in Cultural Anthropology

cultural variability — interpretational anthropology — symbol — linguistic anthropology — linguistic relativism

2.1 Cultural Anthropology and the Question of Methodology

Cultural anthropology is concerned with research of cultural diversity of the human kind. This discipline is sometimes called socio-cultural or social anthropology or also ethnology. Sir Edward B. Tylor (1832–1917) who was the founder of cultural anthropology considered this line of work as scientific study of culture. The word culture is of Latin origin — colere meaning "cultivate". The research of biological aspect of human was not sufficient to explain countless diversity of forms, manifestations and patterns of human life. The discovery of significant influence of cultural environment on individual human perception, behaviour and action became crucial for the anthropological research. R. F. Murphy determines the main subject of cultural anthropology by the multitude of ways how people deal with their social environment. The fundamental task of cultural anthropology is "to comprehend the human situation by way of study all of its manifestations and variations" (Murphy, 2010, p. 15).

"Explorers", missionaries and the first ethnologists were fascinated by otherness of "primitive" cultures. With growing interest in the study of simple indigenous communities, also the awareness of illegitimate treatment of colonial settlers with the foreign cultures,

or in general, the illegitimate disrespect of western "civilized" world towards different forms of human living in less-complex cultures, was growing. During the last Century, the academic circles were overflowed by a great number of ethnographies (scientific descriptions of examined culture) and various ethnographic materials. The **field research** and its compilation had the crucial importance as far as methodologically is concerned. Of course, in our time cultural anthropology is not confined only to studying of exotic and foreign cultures even though the awe of their otherness gave the discipline the birth. Anthropologists today are engaged in smaller agricultural settlements and city communities all over the world. Cultural anthropologists specialize in narrow research and provide very specific information from a particular cultural area. A subject of their observations can be language, music, dancing, religious ideas and beliefs, eating habits, economic systems or kin relations of particular cultural group. Thus the themes of cultural anthropology are diverse: beginning with the endeavour to comprehend concept of culture (in relation to human nature, education, language or socialization); then variable social systems, roles and functions of individuals, kin relations and kin terminology, its observations, description and comparisons; and also ecology and economy, social regulation and order, religious ideas, customs, rituals and manners of acculturation (a process of cultural changes inflicted by direct and long-term contact between different cultural groups).

Typical key **methods** of cultural anthropology are **field research**, **interview**, **interpretation** and mainly **participant observation**. C. Wright Mills, with Kant as his backbone, offers an apt comment: "Theory without data is empty and data without theory are blind" (Eriksen, 2008, p. 39). The demanding character of such research — especially in the traditional case when studying unknown indigenous tribes — underlines the fact that fieldwork is being carried out in the indigenous language and often there is no study material for such languages. The importance of **penetrating into an indigenous language** will be presented along with the

specialized research of anthropological linguistics and cognitive anthropology whereas the language becomes the key element for comprehension of cultural connotations.

The shaping of methodology within the discipline is often associated with interpretation. This emphasizes the inevitable subjective contribution of an observer — researcher who works with compiled information. At this point, it is important to mention the discussion related to the techniques of acquiring relevant data or to objectivity of ethnographic reports — being a topic of significant importance in the field of cognitive anthropology. The classical ethnographies are mostly focused on "objective" description of techniques and processes that provide material needs for members of particular cultural group like family, village, political organization, society and role of an individual. These usually happen without a critical reflection. They were engaged with recording myths and mapping specific beliefs and conceptions. The task of an anthropologist along with his subjective contribution was unnoticed for a long time. As the number of educated anthropologists increased also the number of ethnographies dealing with the same themes and societies had risen. These were often inconsistent and contradictory. The most important turning point was Redfield — Lewis controversy which instigated a meaningful discussion related to an issue of validity of ethnographic data (Colby, 1996). The anthropologist Robert Redfield worked in a Mexican village Tepoztlán. In 1930, as a result of his research, he publishes ethnographic monograph Tepoztlan, a Mexican Village: A Study of Folk Life. After many years Oscar Lewis comes with his research team to the same place to examine social changes in the community. Besides other, he was building on Redfield's work too. His ethnographic report Life in a Mexican Village: Tepoztlan Restudied published in 1951 caused confusion and disappointment in the academic world. Both monographs diverge in many issues even the crucial ones. Redfield reported about a community living in harmony and close cooperation, sharing religious and family values in affable spirit.

Lewis described the same community as a battleground where self-ish concerns, mutual mistrust and competitive rivalry were dominating. Difference between the interpretations was too sharp to be explained as a result of social changes. Credibility and scientific, objective character of the ethnographic reports were gravely contested and thus a meaning and possibilities of cultural anthropology itself. Right from the beginning ethnographies were for cultural anthropology like laboratory for physics, chemistry or biology (Colby, 1996).

In respect to formal methodology, the search, how to solve the problem, led to refocusing the attention to language and implementation of linguistics in developing new and more reliable techniques and more authentic approaches in obtaining data (e.g. participative observation). The side effect of this problem was no less important and it became a part of the fundamental move in western thought in general. Anthropologists realized that if they want to understand a radically different culture they have to struggle for "empathy", "domestication" or penetration to the perspective of the native as far as possible. At the same time this means a conscious reduction of one's own cultural pre-understanding and presumptions. This is beautifully expressed by R. Murphy: "Now we all understand that an observer is part of what he is observing; my wife and me were not studying a group of Indians but a group of Indians surrounding two American anthropologists. And we were looking at them with eyes which were influenced by their meanings and ways of perception; they became part of our subjectivity." (Murphy, 2010, p. 224). These shifts have far-reaching consequences which extend from turning away from ethnocentrism and its criticism to postmodern highlighting of pluralism and anti-universalism.

Cognitive anthropology contributed significantly to reformation of methodology and its outcome was a reaction to the doubts about possibility and legitimacy of scientific anthropological research. **Charles Frake** brought to attention the disputability of simple collection of ethnographic data. Ethnographer should not

collect "words of things" and record distinct linguistic expressions of objects in foreign language according to his own comprehension and selection of vocabulary. On contrary, he should collect "things of words". He also says that ethnographer should "strive to define objects according to a particular system of terms which belongs to the studied group of people" (Frake, 1969, p. 28). Anthropologist should make every effort to approach the cultural world of examined people as it were through their own eyes and let their language to facilitate penetration into their own way of understanding the world. The theory of consensus is a major contribution of **Kimball Romney**. This method aims at providing plausible ethnographic data and their appropriate compilation. Romney employs statistical methods. He recommends verifying reliability of individual statements in relation to another member of the group and to the group as a whole by comparison of the individual statements. Anthropologist gains compact compilation of responses which reflect a state of studied field. The employment of statistical method shall eliminate personal prejudice. At the same time it exposes characteristic signs of the field and a level of intra-cultural variations which could otherwise stay unnoticed.

2.2 Focused on Language

The unique characteristic of the human kind is **language** — system of signs (in sound or writing) enabling mutual communication (Soukup, 2011, p. 144). Language is characteristic by its **symbolic nature and function**. Words, terms, phrases, they all serve as substitutive characters for empirical reality. However, they are not directly depended on the reality. Through the language man is able to create "fiction worlds", to express abstract scientific relations and theories, to write poetry, to comprehend allegories.

The fact that the language is **the basic attribute of humanity** has been observed by man since a distant time ago. Naturally, the discussion concerning "language" and communication of animals

is open and alive also today. Even the philosopher Ernst Cassirer admits that it is not possible to deny some kind of subjective "emotional language" to animals. He builds on the well-known observations of Wolfgang Köhler, who found out that chimpanzees have relatively strong expressive skills. They express emotional states as fear, sorrow, plea, anger, desire, joy and even waggishness in gestures. At that, a different research of anthropoid apes from Yerkes implies presence of symbolic processes — as if in early phylogenetic stage (Cassirer, 1977, p. 85). Behaviour of animal does not lack a system of signs and signals, often a complicated one, used for responding to their surrounding. However, they do not employ substitutive signs which would carry the objective and general meaning independent from actual biological needs or practical interests. Man has developed an ability to create independent meaning units and their relations, an ability of abstraction and theoretical thinking. Therefore, Cassirer states that the core of the problem is a distinction between emotional and predicative language. He identifies such distinction as "a milestone between the world of animals and the world of people" (Cassirer, 1977, p. 84). "The animal language" remains subjective and emotional. Man assigns words and terms to objects and conducts them independently from the actual objects. E. Coreth summarizes this unique human faculty as follows: "The human way of thinking has an inherent ability to abstract general meaning from factual reality." .. Classical tradition speaks of "an abstraction", modern psychology and anthropology speaks of "ideation" meaning more less the same: "an ability to abstract a certain meaning from a real particularity and to give it a general validity" (Coreth, 1994, p. 79). Language is creating categories and classifications systems and identified reality is schematically captured and organized. Even a child goes through an intellectual revolution when it is beginning to comprehend the symbolism of speech and language (Cassirer, 1977, p. 229). Likewise, it is generally accepted according to historical development of human language and according research of indigenous languages that the

human language is developed from factual and specific stage towards more and more abstract stages.

R. Murphy characterizes language as the central part of culture and the core of all symbolic systems. "The language symbols are audible signs which have abstract meaning assigned and is shared with members of a particular language community. "(Murphy, 2010, p. 38). The language is an instrument of social life and mediates social interaction. At the same time it is the primary sign of social identity representing association of an individual to a particular social group or culture (Kišoňová, 2013). Man uses language to express and to record his experience of the world, others as well as himself. It serves for practical purposes of communication ensuring proper course of social life as well as religious, philosophical and scientific discussions. Every language consists of a limited number of meaningful sounds, "a limited number of discrete, standard and discernible sounds, which make meaningful signs" (Murphy, 2010, p. 38). The final list of words contained in a language is called "lexicon of language". Linguistics is engaged in detailed research of language (concerning its structural units, structure itself, functions and development).

Linguistic anthropology explores relations of language, culture and thought of various societies. Language is considered to be a symbolic base of culture which significantly determines human behaviour and experience of the world. The appearance of the discipline is connected with Franz Boas who considered the study of indigenous languages as an inevitable part of cultural–anthropological research (Soukup, 2011, p. 142). The fact, that a lively interest in language arouse in the field of cultural anthropology, has its own practical reasons. Ethnographers were required to master the indigenous language beforehand accessing the life and thought of unknown cultures. They had to make an enormous effort to transcribe exotic sounds, to comprehend their rules, word formation and syntax. Therefore, linguistic preparation became an essential part of specialized training of cultural anthropologists.

Anthropologists, in their research, take language in consideration in its complexity that can be indicated by specifying its basic attributes (relatively independent in respect to the other fields of study): Language is **communicative** (enables sharing and transmission of information between people), symbolic, structured (has its own rules and internal relations), multidimensional (can be analyzed on many levels — semantic, syntactical, pragmatic), generative (inherent unlimited possibility to create new terms, phrases and sentences) and finally, it is extremely **dynamic** system (with perpetual development) (Sternberg, 2002, p. 113). Linguistic anthropologists examine and record cultural differences of various forms of language in relation to its corresponding cultural context. They are concerned with links between language and traditional system of norms, values and ideas. A distinguished figure of anthropological linguistics (and cognitive anthropology) is Flyod Glenn Lounsbury (1914-1998) who explored Native American Indian languages and kinship systems. He also became famous for his contribution to understanding Maya culture, history and hieroglyphs.

The discussion on significant concept of "linguistic universals" and innate linguistic forms drew academic attention to language. The theory is built on thesis that our mind is endowed with internal structures which are responsible for identification, assortment and classification of data. To people, there is a genetically inherent universal grammar which contains linguistic universals, or general a priori linguistic forms. It is not a coincidence that the anthropologists of that time had influenced considerably the theories of Claud Lévi-Strauss and Noam Chomsky. The American linguist and philosopher Noam Avram Chomsky (*1928) asserts that there are structures in mind which are conditional for grammatical speech. For example, he points out the known fact that children in their early childhood learn language easily, quickly and quite naturally. He speaks about an innate structure or a given precondition which establishes the possibility and nature of ontogenetic linguistic development. All grammars of individual languages are derivates of the universal innate grammar and a child is able to "transform" it into a specific expression of his mother tongue (transformational or generative grammar). Through this mechanism children are able to recognize syntactic relations between individual elements of a sentence, connection between object, action and agent which are represented by words of the sentence and thus to learn the language without problems. By way of explanation, according to Chomsky the human brain is composed of special neural structure for language acquisition ("Language Acquisition Device"). V. Soukup presents that Chomsky's theory of innate language dispositions and structures is proved not only by the fact that children undergo the same stages of linguistic development (even the hearing-impaired children) but also by trans-cultural linguistic research, for example the fact that distinct languages really contain so called "linguistic universals" (such as nouns and adjectives). Presently, the theory enjoys particular attention also in field of specialized disciplines (psycholinguistics, sociolinguistics, linguistic anthropology, cognitive sciences, cognitive linguistics) (Soukup, 2011, p. 147).

Another influential issue in the field of cultural—anthropological research is contrary — the question of linguistic relativism. Language substantially influences mode of perception and interpretation of the world in various cultures. The Eskimos' distinction of seventeen words for different kinds of snow is the famous demonstration of the reality how well the languages reflect living and cultural environment. Even F. Boas supported the idea that grammar forms and semantic categories have influence on modes of perception and classification of reality. **Benjamin Lee Whorf** (1897–1941) draws academe's attention to the relation between language and non-linguistic world and the fact that it is much more complicated than generally thought (Eriksen, 2008, p. 277). The famous Sapir-Whorf hypothesis came out from cooperation of Edward Sapir (1884–1939), who was a pupil of Boas, and B. L. Whorf, who studied linguistic anthropology also under Boas (Carroll, 1956). The hypothesis declares that mode of perception of the world is strongly

influenced (determined in an extreme version) by categories and structures of language. Whorf tried to prove that Hopis, an Indian tribe, see the world in radically different way than Europeans or their American descendants. He based his argument on research of their language, which has no conjugation of verbs and has only few names. European languages are more static. There are space and objects in the foreground and the nouns are dominant. Moreover, they strictly distinguish the past, the present and the future. On the other hand, Hopi language is much more dynamic. This is present in a great number of verbs and adverbs while action, process and movement are dominating (Soukup, 2011, p. 163). There are more problems coming along with this theory. Cultural anthropologists question the possibility of translating cultural world with radically different perception and language into a language familiar to us without deformation. Is cultural anthropology a credible and meaningful science? The hypothesis has its radical proponents in academic circles (so called radical version of linguistic relativ**ism** declares that language directly determines thinking processes) and also radical opposition (for example Laura Martin, Goeffrey K. Pullum who contested even the "myth" about the great number of Eskimo expressions for snow) (Martin, 1986). A restrained version of linguistic relativism shows the fact that language influences, in a quite significant way, the mode of perception of the reality. The problem of indigenous languages in question of interpretation (for example Redfield-Lewis controversy) and attention awakening Sapir-Whorf hypotheses belong to those impulses that inspire the anthropologists to seek new approaches to the studied cultures. With linguistics, new techniques of obtaining information began to develop. Also the methodology was reformed. Also specialized branches of cultural anthropology appear: ethno-science (research of indigenous principles of classification and conceptualization) and ethno-semantics (semantic analysis of terminological systems and study of meaning and categories in cognitive systems of different cultures) (Soukup, 2011, p. 690).

In the field of **cognitive anthropology** the language as an agent has an important role. Above all it imparts approach to the unique perspective of the world distinctive for members of a certain cultural community. For anthropologists, the language makes available the possibility of comprehension, systematization and classification of knowledge and findings. It also discloses the style of organization and arrangement of a particular social community. Language is understood as the fundament of cognitive systems of societies. It interprets social experience and models actual behaviour (Soukup, 2011, p. 144). Cognitive anthropologists accept the presumption that linguistic structures of every society reflect principles constituting particularity of an investigated culture. Linguistic training is employed directly, for example, in semantic analysis of indigenous terminological systems or in study of classification rules. A whole range of methods and techniques that are inspired by modern linguistics and semantics was developed. Classification schemes of particular cultural groups (folktaxonomies) and particular semantic fields (domains) became conventional fields of interests of cognitive anthropology. The method which became very significant is the componential analysis. Presently, there is another important linguistic discipline exploring language that belongs, as far as theory and methodology is concerned, to cognitive sciences — it is cognitive linguistics and it brings together findings of theoretical linguistics, psychology of language and psycholinguistics, neurolinguistics, artificial intelligence research and cognitive anthropology. Cognitive linguistics studies language in the context of mental and cognitive functions and structures of mind and the proponent of this discipline is e.g. Monika Schwarz (*1961). The research substantially influenced development of cognitive anthropology, especially in ethnoscience and ethnosemantic research (Bedenáriková, 2013). Anthropological concern about language reflects comprehension of the tight relation between language and culture. Its specific character is presently the subject of many specialized researches.

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3. Fundamental Themes of Cognitive Anthropology

semantic analysis — terminology of kinships — componential analysis — folk taxonomies — evolutionary sequence of colours

3.1 Quest of a Stable Structure

This chapter will present some fundamental themes of cognitive anthropology. The part devoted to cognitive aspects of cultural anthropology illustrates that despite otherness and immense variability of cultures (even with the most fervours proponents of cultural relativism) the research of unknown cultures does not renounce the possibility of research with simplified reference to the profound otherness and impalpability. On contrary, appropriate methods are sought, relevant approaches of accession, comprehension, and also objective designation of distinct forms of living. Even Ruth Benedict and Margaret Mead placed emphasis on the possibility, present in every society based on wide range of cultural activities and ways of expression, to identify common specific emotional and character-wise mode of perception and interaction with the world. A particular culture has deeply inscribed something we can call **specific feature** of its "group personality" (Kanovský, 2004). Nevertheless, the specific features are searched in the field of cognitive anthropology in a study of quite tangible basic cultural components and their interrelations.

Cognitive anthropology started the quest of understanding cultural specifics and cultural knowledge with the smallest units of

systems and the simplest structures of meaning. In the background of these efforts, there is a methodological aspect and a problem of plausible identification of cultural ideas, beliefs and values (D'Andrade, 2003, p. 16). There is an essential precondition in that culture and cultural knowledge are not only a chaotic combination of various information but it creates comprehensible organized system and has objectively intelligible structure and form. To comprehend such structure, it was necessary to develop an appropriate and precise methodology. Therefore, Lounsbury's and Goodenough's work published in 1956, explaining semantic analysis of kinship terms, had extensive influence on further development of cognitive anthropology (Lounsbury, 1956; Goodenough, 1956). The publications indicated a new possible direction of analysis of meaning for purposes of cultural anthropology; then possible approach to dealing with cultural units of meaning and analysing their interrelations; and also organization and structure of these units. Cognitive anthropology gradually advances from basic structures and units to more and more complex structures, schemes and models. There will be an individual chapter dedicated to the cultural models.

3.2 Kinships Terms

The basic cultural structure is a **kinship system**. Kin relations, and the individual roles people play in them, represent a fundamental and constitutive unit of any cultural network of meanings. The individual roles within kin relations are significant fundamental and constitutive unit of cultural meaning network. Various cultures have various organization of kinship systems. This comes to the foreground especially in linguistic analysis of kinship terminology (apart from the invariable of the "marriage" and "parent–child" relation. Comparative analyses make possible to set typologies of kinship systems (Murphy, 2010).

Many anthropologists are attracted by precise methods of formal semantics. **Ward Goodenough** entered the history of cognitive

anthropology with an effort to set an apt formal method which would meet the demands of cultural systems research. Building on anthropological linguistics, he developed so called componential analysis, also known as feature analysis. Componential analysis is used in the kinship system research. Componential analysis is semantic analysis of meaning components based on a list of collected language terms of a particular domain in a culture (e.g. family and relatives) It is performed by uncovering semantic characteristics (components) that divide terms into contrasting subgroups. In other words, the essence of componential analysis is study of 'components' — basic building blocks of meaning in a particular semantic domain. It is possible to set preliminary list of kinship types for examined terms and thus to see their similarities and differences. The most important distinction present in kinship system of each culture is gender (e.g. mother-father) and generation (genealogical level). After Goodenough and Lounsbury, the componential analysis (semantic feature analysis) was received and various forms adapted by many other anthropologist (Romney, Hammel, Wallace, Atkins). Despite various applications, it is always based on a search of common and different features of basic terms in specific domain of kin relations and determining their interrelations. In cognitive anthropology we call the feature which allows us to discern one term from another discerning feature or discerning sign. For example, one of the specifics of Chiricahuan kinship system is that it does not distinguish between siblings and cousins — same terms are used for brothers, sisters and cousins. Such findings provide anthropologists, apart from clarification of formal structure, also with an opportunity to understand better the internal character of studied societies and "structure" the meaning of their living mental world (Scheffler, Lounsbury, 1971).

In cultural systems research the semantic analysing of features did not stay only with kinship terminology even though it remained a paradigmatic pattern for semantic analysis of other cultural domains. It is possible to apply the kinship methods on

many other areas with any set of terms and get important cognitive features of a culture. Later, the question of semantic analysis is moved towards issues concerning cognitive processes as memory, analogy and opinion process based on similarity. Another aspect of the issue is question of psychological reality of schematic terminological models. Cognitive anthropology determines a formal structure of terminological systems. The question is whether the people of a certain culture actually perceive and use the terms in that manner. "Psychological reality of an individual, the world as perceived (by an individual) and known in his own terms, is his world of meanings. 'Psychologically real' description of culture is a description which more or less reproduces in the observer the world of meanings of idiosyncratic users in particular culture" (Wallace, Atkins, 1960, p. 75). Wallace and Atkins in their efforts to evaluate psychological reality of obtained formal systems warn about formalism of componential method. They say that the componential analysis itself will not cover the difference between psychologically real and psychologically unreal meanings. Therefore, application of other methods being more considerate of practical verification and genuine comprehension of individuals and living culture is necessary (Wallace, Atkins, 1960, p. 78).

3.3 Folktaxonomy

Next important thematical area of cognitive anthropology is **folk taxonomy** — indigenous or vernacular taxonomies (classification systems) are connected to the emergence of ethno–science. Distinguished works in this field are *Folk classification* by Harold Conklin and *Ethnobiological classification* by Brent Berlin in which he compiled more than 300 studies in folk biology (Conklin, 1972). The main focus here is on taxonomic relation — \mathbf{x} is kind of \mathbf{y} — that is the principal way how people organize knowledge about plants and animals. Eugen Hunn proposed a hypothesis in which characteristic features of plants and animals are perceived as "gestalt", or

total configurational unity ("doginess", "catness", and so on) — configuration or set of large number of attributes clamped together into one quality of "doginess" (tail, muzzle, barking, puffing, etc.) (D' Andrade, 2003, p. 92–121).

Folk taxonomies are composed of a number of levels. The first is the beginning of the taxonomy (level "zero"). However, this level is absent in many cultures (for example general term "animal", "plant" referring to world of animals and plants). Within the unique beginner level, there are basic "living forms" (for example tree, bush, grass) which were identified on the basis of distinctive differences (for example an apparent difference between tree and bush). The term "generics" were in folk taxonomies representing key terms of classification. This is the third level — "natural kinds" of things — in other words specific biological forms (mouse, daffodil, oak). An interesting finding was that even the folk generics are not corresponding with the scientific (biological) genera and species. However, they are strongly congruent with classification systems of scientific biology (D' Andrade, 2003, p. 92-121). Below the generic level are usually the "specifics" based on minor differences in colour or size (e.g. a white oak).

Robert Randall posited hypothesis that some kinds of taxonomic structures are stored in memory as small and very well organized sets of organisms (e.g. the term "cat" implies domestic cat, tiger, leopard, puma and such), which involve configurational picture or prototype bearing representative qualities of a group ("cat-like", "dog-like", etc.). With the idea of prototype is connected its critique of classical level model taxonomies especially for its psychological reality. He is questioning whether the exact character of taxonomic structures could be constructed by anthropologists' controlled questions (Randall, 1976). Cecil Brown studied primarily folk botanical taxonomy of Mexican (Maya) Huastecs (Brown, 1977). He was also one of the first anthropologists who applied the model of taxonomic classes also on non-biological areas — e.g. tools or means of transport. Brown claims that there is a small set

of potentially universal botanical living forms. He includes terms "tree", "grass", "bush", "vine" and "herbal plants" into plants and terms "fish", "bird", "snake", "worm/beetle" and "animal"(mammal) into animals (creatures). In his estimation, these expressions occur universally and are present in vocabulary of any autonomous language worldwide. Other anthropologists are even more venturous and are testing hypothesis about **ontological nature** of folk taxonomies (e.g. Scott Atran) (Atran, 1985). Human beings are distinguished by specifically (probably genetically) determined manner of perception, learning and recognition the world of animals and plants. Our perception of living forms of being is incomparable with perception of non-living objects. Man understands naturally that a chair without legs is not a chair but a piece of wood. But a tiger born without legs is still a tiger (and a creature arousing compassion in us). Atran states that a tiger is as a tiger not because we distinguish certain "tiger" features but due to its natural essence of "being tiger" perceived and obvious to us. Also **Brent Berlin** supports the opinion that the data compiled in area of folk biology are evidence of general human ability to identify distinguishing features or patterns in nature. We are also able to distinguish one summarizing pattern in particular fauna or flora and scientific biology calls this "a natural system". Categorization of living beings according to their similarities and according to their morphology into groups is inherent to human kind. There is a high probability that the ability to distinguish characteristic features or patterns is inborn (Berlin, 1992).

3.4 Colour Perception and Colour Terms

Towards the end of 90s, the inter–cultural comparative study by two anthropologists, **Brent Berlin** and **Paul Kay**, *Basic Color Terms* (Berlin, Kay, 1969) arouse interest in academic world. First of all, they applied strict criteria to eliminate non–basic colours. The English terms of colours (kind of "generics" of folk taxonomies)

became for their research determining: black, white, red, green, yellow, brown, purple, pink, orange and grey. They used the Munsell colour system with 320 colour units of maximum chroma in the research. Apart from that, they used number of achromatic colour scales (from black to grey and white). The researchers acquired the data from controlled interviews and from "experiments": a person should mark coloured units which he would "in any case call x" and units which are "the best and the most typical example of x" (focal). The research was carried out in twenty various languages (among them were Arabic, Catalonian, Bulgarian, English, Hebrew, Swahili, Vietnamese, Philippine language, Tagalog and others). Some results were surprising. The choice of focal points of basic colours (in other words, the choice of position where the most typical colour units were within the colour scale) came out in a high level of congruence. The highest level of congruence was in "red" and "yellow". A lower level of congruence was in "green", "blue" and "purple". Even the positioning of focal colours in various languages showed relative constancy. The determination of boundaries in identifying a term of a colour on the colour scale was more varied. A high variability was present also in determining a number of basic colours some languages have two terms for basic colours (black and white), others have eleven. Anthropologists have discovered that the more complex society, the higher level of technological development, the fuller the scale of basic colours. However, the most interesting discovery was definitely the fact that basic colours were always following in the same order (independent from the number of basic colours). Concerning the language with two basic colours identified, the colours were indicated in sequence "black" and "white". If the language had three basic colours, the sequence was "black", "white" and "red"; if there were four, one colour was adjoined to the colour scale as another basic colour. The whole sequence of colours looks like this: black, white, red, yellow, green, blue, brown, purple, pink, orange and grey. This constant way of sequencing colours is called **evolutionary sequence**, because based on that it is possible

to anticipate the sequencing of new terms of basic colours in language development. Despite of these evolutionary stages of identifying, basic colours are much more complex than proposed by Berlin and Kay as proved by many other researches in this area. However, the essential findings of Berlin and Kay are generally accepted, valid and verified, and they are being connected with the universal physiological structure of human vision of colours (D'Andrade, 2003, p. 111).

Coming to a conclusion, let us point out that strict formalism of method and cognitive view of mind as a kind of categorizing tool did not stay without critique, among others Clifford Geertz was involved. Some anthropologists drew attention to the fact stating that it is not possible to define and reduce the exuberant cultural life and cultural knowledge to abstract classification schemes in spite of certain scientific advantages of formal schematizing (Shore, 1996).

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4. Culture

philosophical anthropology — eccentricity — mediated immediacy — symbolism — system of ideas

4.1 Culture as Human Specificity

In the first half of the twentieth century, together with the increasing amount of information in empirical science, anthropological research drew philosophy's attention. They claim for proper philosophic reflection of the scientific findings. Philosophic anthropology brings philosophic-anthropological reflection about man as a cultural being. Talking about German philosophical school where the main proponents are Max Scheler (1874-1928), Helmut Plessner (1892-1985) and Arnold Gehlen (1904-1976). These authors talk about a new "anthropological turn" and they are following in their reflection the contemporary findings of biology, psychology, etology, ethnology and other specialized knowledge. In emerging philosophical anthropology, mainly biological orientation was manifested. The authors based their philosophical research on the comparative studies of man and animal, or the broader position of man within the whole of organic and inorganic world. The question about the essential nature of man becomes central as a guest for the unique and specifically human characteristic which distinguishes man from other animate beings. In this search, they encountered the striking aspect of culture as an exceptional human phenomenon. The cultural "emergence" out of nature as

detachment from immediate bond of nature determination is the common ground of all philosophical anthropologists presenting **man as cultural being** (Röd, Holzhey, 2006, p. 287–322).

The central term of Plessners thought is eccentricity, understood as a specific form of man's being, as a principle of being human (Plessner, 2000). Man is a cultural being that can understand and decipher himself on the basis of his inventions (language, history, art, some religions etc.) Plessner notices that all the living things are interacting with their environment. Plants directly in place (plants release seeds and these seeds can travel), animals to a certain extent are independent from its environment and has its conscious centre. It can control and perceive its body. Animals can experience its life consciously. However it does not experience itself, it is not aware of its own experiencing (maybe we have not yet invented the technology that would allow us to determine whether animals are aware of his own experiences). For human beings distance is a characteristic, as a distance relation to the world and to himself. Man is aware of his centrality and he can "step out" of that. He can create distance from himself and objectivise his Self. Man is a self-reflecting being. Eccentricity is universal principle of human essential nature.

Eccentricity is in close relation to formation of specifically human world which is the world of culture. This means emancipation from the immediate bond with nature. Man is, in comparison with other creatures, a being feeble in instincts. Nevertheless, man compensates this handicap "artificially" through the eccentricity as consequence of his eccentric positionality. The fact, that man does not live in his immediate determination by nature, means moment of anxiety and insecurity. In the reflecting distance, he is aware of unpredictability of the open future that is his uncertain situation and vulnerability. Therefore, he secures himself "artificially": He creates mediated environment, "natural artificiality", culture. Plessner defines three basic anthropological laws (the law of natural artificiality, the law of mediated immediacy, the law of utopian

standpoint). E. Coreth includes all in a sole principle, **the principle of mediated immediacy** (Coreth, 1994, p. 68). Negation of immediacy is manifested on the biological level (man is not biologically specialized) and on the non–biological or meta–biological level, can be called spiritual, as present for example in form of Scheler's "art to say **no**" to the immediate biological needs and impulses (Scheler, 1968).

The philosopher and sociologist **Arnold Gehlen** also builds on findings in biology. He interprets philosophic anthropology as general teaching about man which precedes all the specialized anthropologies. He became known in German philosophical circles with his work Man — His Nature and his Place in the World (Gehlen, 1940). He emphasised wholeness and systematic understanding of man perceived as a unique project of nature absent in any other living form. The starting point of his thoughts is act, in human action. Man is an acting being, who is able to transform nature by his activity and to accommodate his environment. Human action does not serve only to immediate biological goals and needs, it produces something "higher" — culture. Therefore, action is for Gehlen a principle which makes a man the man. The need for action is based also biologically — as compensation of the feeble instinctive endowment. Animal has innate instincts specified by his kind and is firmly harmonized with his living environment and tightly biologically specialized (e.g. by sharpness of his senses, construction of his body or else). Man seems to be, in comparison with animal, absolutely not specialized with feeble instinctive endowment and insufficient specialization of body, etc. Therefore, Gehlen states that man is deficient being (Mängelwesen). As an impoverished animal in nature man is unprotected and vulnerable. He compensates his handicap by the unique cultural endowment. Culture is "second nature" for man, it is a principle of "relief". An important role in cultural relief plays speech, which is a critical breaking of immediacy by enabling communication, planning and most importantly action. Gehlen calls culture metaphorically "a nest" build by

man in the centre of the world. It includes institutions and social norms which arrange coexistence of people. Man is "cultural being by nature" (Röd, Holzhey, 2006, p. 287–322). An important theme of Gehlen's thoughts was technology which belongs to the man's life "in the nest". **Technology** is a unique creative act, an achievement of human skills and intellect. Technology is also a unique means used for man's conducting of nature. Gehlen called the world of technology "macro being" and included it to the characteristic of human nature itself (Gehlen, 1972).

Erich Rothacker (1888-1965) and Michael Landmann (1913-1984) belong to cultural stream of philosophic anthropology. They are concerned with man as a product as well as producer of culture. Landmann claims that non-specialization is not possible to understand only as a reason for development of specifically human features which should compensate but it is also a result of his humanity. Man can and even must put aside his specialization because his life is based on a different kind endowment. He does not need it and even it could be obstructive" (Seilerová, 1995, p. 93). He assigns to human being two basic characteristic signs which are closely interconnected — freedom and creativity. Creativity is best manifested in creation of culture, the whole diverse cultural world of human. Despite the variability and diversity of historical and cultural "faces" of man, he finds universality applicable principle, universal antropinum: in any culturally-historical context human can realize himself by employing his creative abilities and through education and formation he comes to himself.

Philosophical anthropology in its considerations demonstrates that the unique approach to the reality and the specific perception and recognition of reality is inherent to human beings on the basis of their "cultural nature". At the same time, it is an evidence of how inspiring and fertile the mutual dialogue between specialized anthropological disciplines and philosophy.

4.2 Culture as Symbolic and Ideas System

To comprehend the culture as symbolic and cognitive system means to direct attention from tangible, objective or material side of culture (e.g. in form of artefacts and myths) to the side of cognitive subject. The way, in which we recognize world, the condition of possibilities and structures of this recognizing knowledge came back into anthropology with a new relevance.

The philosopher of Neokantian school Ernst Cassirer (1874– 1945) shows that **symbolism** is a unique distinctiveness of human recognition of the reality. We comprehend world through symbolic system. Homo sapiens is at the same time homo symbolicus — creator of the whole universe of symbolic meaning. Symbol is "the key to the essential nature of man" (Cassirer, 1977, p. 75). Cassirer understands his philosophy of symbolic forms as an all inclusive philosophy of culture. He claims that comprehension of human being is possible only through his "functions", this means, that human creations as result of his activity should be decisive: language, myths, religions, ethics, law, science, are all specifically human works which create our unique human, cultural world. Symbolic activity is an ever present cognitive process which produces symbols, representative signs. Man gains understanding of the world thought these. In general, three basic symbolic forms are discerned: language, myth and science. Each one of these provides original approach to reality. Man is connected with language forms, art images, myth symbols or religious rituals in such extent that he is not able to perceive anything if it is not mediated through a channel like these mentioned above (Cassirer, 1977, p. 78). He is not able to come back to an absolutely immediate relation with nature. His relation with nature is inevitably mediated by symbolic systems and he is able to perceive and learn only through these.

It is not accidental that cognitive anthropology is often presented in close connection to **symbolic anthropology**. Symbolic anthropology approaches culture as a system of symbols and meanings

(religions, myths, rituals, arts, languages, and also kinships, economy, politics, technology). V. Soukup presents the idea that the ability of man to perceive and understand the world through terms and categories has led to a conception of culture as symbolic construction — "system of symbols and meanings through which persons interpret their behaviour and reality around them" (Soukup, 1994, p. 147). Objective reality or cultural facts are replaced by meanings inscribed to facts and cultural realities by people. These inscribed meanings are crucial for comprehension of specific characters of a particular culture and at the same time for deeper comprehension of human knowledge and perception of reality itself. Foremost representatives of this school are **L. Dumont** (1911–1998), a French anthropologist, **V. W. Turner** (1920–1983) and **M. Douglas** (1921–2007), British anthropologists and Americans **D. Schneider** (1918–1995) and **C. Geertz** (1926–2006).

Clifford Geertz entered the history of cultural anthropology by his work Interpretation of cultures (1973) presenting his semiotic interpretative conception of culture (Geertz, 1973). He emphasises that human reality is inevitably mediated through symbols, cultural forms which are public (socially accessible) and conventional (contingent in regard to historical and local context) (Shore, 1996). Symbol, as comprehended by Geertz, is any object, act or event, which serves for transmission of thoughts or meanings (Soukup, 1994, p. 570). The most significant class from the diverse forms of symbols is the language which serves to organize and classify human reality. Symbolic systems, according to Geertz, are especially the sources of "external information". Culture is interpreted as a unique sign system and network of cultural symbols and meanings involving inevitably humans influenced in their behaviour and action by culture. They share their "cultural articulation" in the process of social interaction (Soukup, 1994, p. 570). Man is an animal chained by meanings, which he created himself. He considers culture as a net, trap or chains. Analysis of culture is not experimental science seeking laws but interpretative science seeking meaning (Geertz, 1973, p. 5).

A historical remarkableness is that the first cultural anthropological definition of culture is cognitive in its essence despite the fact that cognition itself was not in the centre of attention at the beginnings of the discipline. Even **E. B. Tylor** conceived culture on basis of mental faculties. He claims that these enable positive development and progress of civilization. According to B. G. Blount, Tylor places emphasis on the unique human faculty to produce knowledge, beliefs and ideas. Culture and civilization is complex wholeness including knowledge, beliefs, art, law, morals, customs and all other abilities and traditions acquired by man as a member of society (Blount, 2002, p. 13). Also in other definitions the cognitive faculties of cultural humans come forth. Anthropologists Alfred Kroeber and Clyde Kluckhohn collected 164 complete and 300 partial definitions of culture and based on that they attempted to create their own definition, or better to say own theory. The claim, that traditional cultural ideas (historically derived and selected) and appertaining values create essential core of culture, became the central point to their theory (Kroeber, Kluckhohn, 1952, p. 357). W. Goodenough's definition of culture, underlining structural and linguistic approach, came to appreciation in 1957. Culture is directly connected with knowledge and social systems of ideas. In other words, culture is complex knowledge. It is a set of certain knowledge generally accepted and shared. Members of a particular society need such knowledge for successful coexistence, apposite behaviour and action within actual cultural group (Goodenough, 1957, p. 167). Another recognized proponent of cognitive anthropology Stephen A. Tyler (*1932) also disagrees with concept of culture as a material phenomenon. However, he defends a cognitive definition of culture. In similar manner, American linguist and anthropologist Roger Keesing (1935–1993) speaks of cultural codes as acquired and commonly shared cultural knowledge which determines human behaviour unnoticeably. Cultural codes are conditional for successful mutual communication. Although, they are generally unconscious, in relationships they are well understood.

Ward Goodenough distinguishes two spheres of reality: phe**nomenal**, which consists of material structure of society (artefacts, external events, empirically perceivable patterns of behaviour) and **ideational** (immaterial system of culture such as system of terms. norms, principles and values) that is not accessible to direct observation (Soukup, 2005, p. 521). To access the ideational sphere of a foreign culture is possible by long-term common life in indigenous environment comprehending language and in dialogue with natives understanding their specific perception of reality. These two areas, two autonomous orders, should not be interchanged. It is necessary to distinguish and employ a distinct and appropriate approach to each one of them. Therefore, Goodenough claims a limitation of concept of culture to system of knowledge, system of common ideas. Culture "consists of all that man needs to know or believe in order to act in an appropriate manner being acceptable for members of his society. Culture is not a material phenomenon. It does not consist of situations, persons, behaviour or emotions ... It is more of an organization and form of these existing in people's minds "(Soukup, 2005, p. 521).

Bradd Shore, a renowned contemporary American anthropologist, is concerned with cultural models and their relation to human mind. His understanding of **culture** is extensive **heterogeneous set of cultural models** (storage or set of conventional models). These models refer to immense diversity and variety of human establishments and are "projections of conventional understanding of reality" (Shore, 1996, p. 45). They belong to common experience of (social) human life. According to the author, comprehension of culture as a set of conventional models has several advantages. Among others, it allows bridging material (or empirical) concept of culture and cognitive concept of culture, that is culture as a form of knowledge, or culture as a mental representation.

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5. Cultural Models

cultural model — cognitive scheme — process of schematization — foundational model — typology of models

5.1 What are Cultural Models?

Interest of cognitive anthropology in description of cultural models was inspired in 80s of the twentieth century (Holland, Quinn, 1987). It is also one of the most important contemporary themes of cognitive anthropology. In anthropology, model means a certain **kind of representation** which is used for processing of ethnographic data or for generalization of research results (Fischer, Kronenfeld, 2011, p. 211). **Cultural models** are anticipated and naturally accepted models of reality that are shared by members of society and play significant role in understanding of their world as well as of their actual behaviour (Holland, Quinn, 1987, p. 4).

Roy D'Andrade defines cultural model as **cognitive scheme** which is shared in inter–subjectivity by a particular group (D'Andrade, 1990). Cultural model serves as an auxiliary schematic draft of various kinds of cultural knowledge and refers to (often) unconscious set of presuppositions and modes of understanding of world in a particular culture. Model consists in interconnected sets of elements. A meaningful connection of these sets represents something that serves as an abstract systematization of experience (D'Andrade, 2003, p. 151). Cultural models can be of various forms and it is possible to differentiate them according to several

criteria, as expanded below. Among examples of public cultural models can be specific architecture, receptacles, dances, rituals, clothing (and other forms of "material cultural) (Shore, 1996, p. 44). No less important are the less tangible forms of cultural models as typical gestures, conventional ways of communication and behaviour, for example in social interaction (shaking hands, kiss, taking off hat etc.). Some of the models are directly bound to conscious cultural self-identification of members and their character can become strictly formal (some ritual ceremonies of indigenous tribes. American Thanksgiving, commemoration of Cyrillus and Methodius inheritance and so on). Nowadays, anthropologic construction of models is also employed functionally in important practical areas. It helps in ecological and environmental research where it serves especially with description of traditional and local ecological findings (ethno-ecology) but also in medical and agricultural area (Blount, 2002, p. 22). In general, research of cultural models aims at comprehension and description of process systematizing cultural knowledge.

B. Shore underscores difference between understanding models by cognitive psychology and by cognitive anthropology. Psychologists conceive model as a subjective representation constructed by an individual mind (individual → [mental model] → physical environment). Cultural anthropologists take in account intermediary role of culture (that is of social environment) considering important role of inter–subjectivity. In their conception, cultural models are more inter–subjective representations constructed by an individual in relation to his cultural environment: (individual → ([cultural model] → social environment) → physical environment (Shore, 1996, p. 49).

Cultural models can be comprehended as **interpretational frames**. However, they do not necessarily have to be characterized by strictly defined boundaries. The boundaries are more of flexible, permeable and pliant character. If there is a personal experience in accordance with accepted meaning or if there is an assigned

and commonly accepted meaning to such individual experience, a model is reinforced. However, when encountering a different culture, an inter–cultural interaction and interlacing occurs, which can contest, modify and even change the model. Shore states that long–term inter–cultural experience, creating new and unimaginable dimensions and possibilities of world perception, can significantly influence individual consciousness and cause profound changes. Cultural models emerge, they can be transformed and can also disappear (Shore, 1996, p. 49).

Bradd Shore is convinced about usefulness of cultural models in anthropology. However, he puts forth a need to clarify what cultural model is and what forms it has (Shore, 1996, p. 45). Anthropological concept of model derives from Plato and Kant "general forms" or "schemes" which enable knowledge and understanding as they provide basic structure and orientation for human cognition within every individual experience. Models help to persons in assigning meaning to multifarious reality which surrounds them. They are creative simplifications or schematizations of reality that capture relevant abstract information. Therefore, Shore speaks of "schematization" in connection with models. For anthropologists, models are significant aids in processing information (Shore, 1996, p. 47).

5.2 Typology of Models

Common effort of presented research is to discover and analyze fundamental organizational structures — models. There is an immeasurable number of conscious cultural models, same as those less–conscious. Many authors endeavour to organize researched field and they set up auxiliary typologies of cultural models (Bennardo, Kronenfeld, D'Andrade, Shore).

Bennardo and Kronenfeld distinguish, within examination of various types of cultural and mental representations, several types of cultural models. All of them express specifically distributed and differently shared systems of cognitive structures (Bennardo,

Kronenfeld, 2011, p. 78). In the first type of cultural models, that is cultural modes of thought (CMT), it is necessary to bear in mind their constitutive character. Bennardo speaks about CMT as foundational cultural models. Every cultural group has a certain "metaprogram", a basic and constitutive type of module, which provides relatively stable conceptual and organisational structure — specific point of view or basic guidelines for interpreting actual life events, also the unusual ones. Generally applicable cultural patterns for interpretation, learned by members of society, are being derived from cultural experience. They are grounded in even more basal structures (meta-structures) which are expressions of a unique existing specific cultural organisation of phenomena (Bennardo, Kronenfeld, 2011, p. 78). 2) Cultural conceptual systems (CCS) represent type of models, which refers to series of data or references related to logical and cultural correlation of set of terms. It is a classification of a certain kind of knowledge which is spontaneously used in thought and action. They involve claims and beliefs about the world, functional relations and functional knowledge (for example, connection between table and chairs); cultural constructions (such as, university life is connected to sleepless nights); or logical relations (for example, relation between terms "brother" and "sister", or in general, system of kinship terms); or else sequence knowledge (such as, what it means to progress from kindergarden to university); then understanding relation between part and whole (desk and drawers), and so on. Individual conceptual systems create many complicated variations of interrelations. Cultural conceptual systems provide to anthropologists information about actual organisation of things referred to by words. Every cultural group has its own conceptual system and their impact can differ in dependence on specific cultural experience of the world. In inter-cultural zones, it is possible to find universally applicable elements of some relevant aspects of cultural structures. (3) Cultural models of action (CMA) represent "scenarios" of particular behaviour with some related goals, knowledge, value systems and context.

Cultural models of action are characteristic by specificity of their actual application (Do that, in this way and right here) Bennardo, Kronenfeld, 2011, p. 97). They model action, provide "plan of a play" or plot for a particular situation. There are also possible more alternative model variation (for example various cultural models of dating behaviour) which can be even contradictory. An individual positioned into a particular situation is not determined, nor forced to apply this or that cultural model. However, it is certain that application of models is beneficial: there is always a meaningful and socially acceptable reaction on a situation ready at hand. (4) Bennardo and Kronenfeld present the fourth type of cultural models which are called proxemic systems connected with various kinds of social situations. They are related to interpersonal bonds, volume and intensity of communication, reciprocal proximity and distance etc. Authors also distinguish (5) characteristic modes of expression and principles of social interaction, (6) characteristic emotional responses, (7) system of active values (models of active values, practical values contrasting formal values or just nominal values) and (8) typical cultural types of organizational structures.

Shore proposes to discern models on behalf of correct reasoning and conducting of cultural models (Shore, 1996, p. 46–69). In the first discernment, there are two kinds of mental models, **personal** and **conventional** (**cultural**) mental model, according to "two dimensions" of reality inherent to human beings (personal — inner and cultural — outer). Simple and illustrative examples of personal mental models are mental maps. Everyone creates them spontaneously for better orientation in surrounding reality. For example, the premises we use practically every day are mentally "mapped" by our mind. We also have mapped the way to work, to school, to grocery, especially according to importance of orientation points on "my" way (bus stop, newsagents, refreshment shop). Our colleague or class mate has a similar map of "his own" way to work or school with orientation points important for him. Our minds schematize and simplify reality. We create supportive personal mental models

which are individual and unique, that is they are not objective. On the contrary, conventional mental models are those which are common to members of the same community. They are externalized mental models which found their expression in socially accepted traditions, establishments or institutions and which are at the same time internalized. Simple examples are conventional gestures (Japanese bowing, Western shaking of hands or friendly hug) that are models of human encounter situations like entering a room or visiting someone. Their persisting existence is contingent and formed through endless social interaction. These models have to be inscribed to every generation anew, into minds of members of a society, they would get a motivational force for the community. This is the way how conventional models become a personal cognitive source for an individual (Shore, 1996, p. 47). The main difference between personal and conventional model lies in that the central point of internalization of cultural models is in social pressure or socially "forced" experience (traffic rules, socially acceptable clothing, etc.). Power of such pressure can be tested easily by anyone: no more is needed than to give a talk at a conference completely unclothed or in a wedding dress. Of course, relation between personal and conventional models is very delicate, and interlacing is considerable. B. Shore points out a high degree of intra-cultural variability within a "compact" cultural unit. Based on his research stay with Polynesian Samoans he refers about several alternative cultural models and also about colliding, contradicting, models. Cultural models can come to a problematic relation with life experience of an individual. Collisions of cultural models quite often force an individual to choose one of them. In other instances, cultural models can collide with the deepest human needs and desires.

The same author insists on considering essential distinction between two kinds of cultural models, **established** (public, objectively observable social institutions and establishments, rituals, myths, proverbs) and **mental cultural models** (cognitive representations of these institutions perceived and processed in mind of

an individual considering also his unique experience and endowment). Another distinction lies in difference between models of practical purpose and abstract foundational schemes, which consider, organize and impart common form and orientation for other cultural models. For example, in Samoan culture, it is possible to identify basic foundational scheme "centre — periphery", on which concrete terms of many cultural fields of Samoan life are built (dancing style, organisation of village and others). Another distinction is based on two possible perspectives that can be taken: **model** of observer is typical by a certain distance, by abstract, categorical and categorizing approach towards experience, which is organized into a form of a neutral structure; and model of partaker can be, by contrast, very vigorous, dynamic and engaged in experience itself. Shore also presents differentiation of typological models according to types of structures and types of functions. The most influential structural distinction is between linguistic models (for example linguistic scenarios of certain model situations; propositional cultural models such as Decaloque in Judaeo-Christian tradition; lexical models with taxonomies, dictionaries and lists; verbal formulas like proverbs, models of prayers, traditional stories; and others) and non-verbal linguistic models (for example, picture schemes, which are mainly related to somatic and spatial experience; set of stylized action and gestures; visual pictorial models also with iconographic models such as characteristic cultural paintings or ornaments as well as colour symbolism of a particular culture).

After all, **functional typology** of cultural models includes **orientational models** (for example, models of spatial orientation such as maps and navigational systems; time models such as linear or cyclical models of time; models of social orientation like models of work distribution or social classes), **expressive or conceptual models** (for example, classifications — lexical taxonomies of kinships, fauna, flora, illnesses, food; patterns — exemplary events, exemplary heroes, saints and villains) and **models of task solving** (for example, schemes, recipes, lists, models of convincing — plea,

brute power, rational argumentation, tears, magical practices or mnemonical aids).

Shore in his book *Culture in Mind* (1996) developed his own anthropological approach to the phenomenon of culture and he defined it as an ethnographical view of mind. "Ethnographical mind" is conceived as a characteristic feature of human being in general.

He defends importance of cognitive—anthropological research of mental and cultural models and endeavours to consider significant role of cultural representations and profound influence of cultural models on our mental, individual and social life. Ethnographic mind, which is in its functioning directly dependent on external models and it is opportunistically creative in production of new models, is an essential sign of culturally—fruitful and meaning—creating primate (Shore, 1996, p. 380).

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