

## TEACHERS' DISCOURSE: NEUROETHICAL PRINCIPLES

**Hanna Truba**

Ph.D., Associate Professor, Odessa I. I. Mechnikov National University, Ukraine  
e-mail: 3182009060@ukr.net, orcid.org/0000-0001-9944-0476

### Summary

The aim of this paper is to describe two different categories: the teacher discourse and neuroethical principles. New reality of life and general digitalization brings new opportunity not only to students to study any course but also it brings ability to the teachers to worldwide their lessons. Therefore, it faces new challenges and imposes great responsibility for teachers. We all should to find out the new ethical principles. The teachers' discourse refers to a type of communication that presupposes professional communication between persons belonging to the same group in a professional institution, in the center of which is the discursive activity of representatives of the scientific community, which ensures the embodiment of their intentions and the achievement of a perlocutionary effect. With the aim of transferring professional knowledge and for the intellectual and emotional impact on the addressee, where his essential characteristics reflect the general human, ethnic and interpersonal properties inherent in society and the scientific continuum, implemented within the framework of a social institution. Methods used in the study: general scientific (analysis and synthesis, induction and deduction), methods of theoretical research (from abstract to concrete), the method of description.

**Keywords:** communication, types of communication, digitalization, influence, responsibility.

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### 1. Introduction

At the present stage of development of scientific thought, neurosciences acquire relevance and take their acting place among others. The research of neuroscience issues has not spared philology and pedagogy. Under the influence of modern research, the issues of such scientific disciplines as affective neurobiology, computational, neurochemistry, neurophysiology, neural engineering, neuroanatomy, neuroetology, neuroimmunology, neuroinformatics, paleoneurobiology, neuroeconomics, cognitive science, social neurobiology, neurobiology, neurobiology cultural neuropsychology, neuroethics, cognitive science, cognitive science, neurolinguistics, social neurobiology, cognitive neuropsychology, social cognitive neurobiology, neuropsychologists. We are delving deeper and deeper into the processes of thinking, thought of correction, thought of suggestion of a person, and, therefore, the question of ethics and the limit of this intervention is relevant.

### 2. Neuroetic and its principles

There are few international projects. The Human Brain Project (HBP) is a major human brain research project launched in 2013 in Geneva, Switzerland by Henry Markram and bringing together hundreds of scientists from 26 countries and 135 countries. The aim of this project is to create the world's first model of the human and rodent brain. The HBP project is unprecedented in its scale and the largest in the history of the study of the human brain, the project budget is \$ 1.6 billion, the project is funded for 10 years, until 2023.

There are many subprojects in the project itself, one of which is SP12, which aims to create an ethical basis for further research. Moreover, the subject of research of this program is questions of neuroethics. Therefore, it is worth first delineating the boundaries of this new issue.

The emergence of new humanities, especially at the intersection of different fields of scientific knowledge, is a rare phenomenon today. B.G. Yudin was one of the first in the post-Soviet countries to study the new state of science and society in the context of the moral aspect (Yudin, 2015: 28–32; Yudin, 2016: 23–25). From his point of view, neuroethics is a part of technoscience, and the problem of human improvement is one of the central ones for it.

The main feature of neuroethics is the definition of the methodological and conceptual field, which should not go beyond and the establishment of the ultimate methodological level. G.D. Yudin and mention the history of bioethics: Nuremberg trial of fascist doctors and the development of the Nuremberg Code, which is the basis of modern regulation Biomed call, and that extraordinary leap in the development of medicine and draw direct parallels with Neuroethics (Sidorova, 2015: 346-362; Yudin, 2015: 28–32).

The beginning of Neuroethics, in contrast to bioethics, can be said more clearly, which indicates its "program" and, consequently, reflexive nature. It was programmed, on the one hand, by the rapid development of neuroscience and the expansion of the spectrum of neuroscience. On the other hand, the emergence of Neuroethics was the result of a general trend of humanitarian support of scientific megaprojects in biomedicine. The first such experience was the ethical examination of the project of the human genome, which received its form in such neologisms as gene-ethics or ethics of genomics.

This experience was assessed as necessary. The practice of humanitarian expertise was institutionalized, suggesting that other scientific trends must have their own ethics, and when neuroscience began to flourish in the 1990s, it turned out that a precedent had already been set for their humanities research. The term did not have to be invented because the concept of "Neuroethics" had been in use since the 1970s. However, it was highly specialized and denoted medical ethics in neurology. Neuroethics at this time included ethical problems of interaction with patients with brain disorders (for example, after epilepsy or brain injury), as well as problems with mental disorders in children. With the development of neuroscience, the term "Neuroethics" has become increasingly used in the field of modern methods of studying brain processes and the use of the results in medicine, trade, intelligent systems, etc. (Sidorova, 2015: 346 – 362).

In 2001, publicist and in the recent past, R. Nixon speechwriter W. Sefay, who also gained popularity because he was fond of lexicography, defined Neuroethics as a discipline belonging to highly developed countries, which discusses the rights of dealing with the human brain or its improvement, defining its belonging to one of the chapters of philosophy, which, by studying the mechanisms of morality. Neuroethics conquers new territory from the old philosophical discipline (Safire, 2002: 3–9).

Since 2002 to 2003, D. Illes from the Stanford Center for Biomedical Ethics records the formalization of neuroethics as a science due to the fact that at this time four major conferences were held that identified key problems and initiated the unification of scientists who studied them (Rees, Rose, 2004: 316 ).

Simultaneously with this process, Neuroethics was transformed into an academic and educational discipline, which indicates the emergence of scientific journals and university courses. A group of scientists and financiers from around the world began to discuss ways to support international cooperation in the field of neuroethics within the framework of the association, which became known as the International Network of Neuroethics. The monthly newsletter "Neuroethics" has begun at Stanford University.

In recent decades, the development of applied ethics is especially relevant due to the powerful development of biomedical research and the need to codify moral regulation. New forms of professional and institutional ethics have emerged. In this series, it would seem, of course, that Neuroethics, as well as bioethics in general, is one of the forms of applied ethics. But the intrigue is that they are trying to explain Neuroethics as the very morality in a society, where cognitive improvement and artificial intelligence will prevail. And the methodological situation of a double understanding of ethics as a synonym for morality and how knowledge about morality in relation to Neuroethics receives a new focus: in addition to the search for the good and the due and their normative justification, the ontological foundation of morality itself is called into question. At the same time, the nature of consciousness and its phenomena is being revised in cognitive neurosciences. Neuroethics becomes, in fact, a natural science – Neuroscientific ethics and gets the opportunity to technologize its conclusions, turning them into recommendations for improving human behavior and relationships in society.

On the one hand, Neuroethics is presented as a kind of bioethics, applied ethics, neurore-search ethics and neuroscientific ethics. On the other hand, its manifestations as an element of technoscience and options for accompanying anthropological transformations, which received the name of human improvement in the era of biotechnology, are noted. Thus, the disciplinary aspects of Neuroethics are studied from the point of view of a critical analysis of the biotechnological improvement of a person introduced in bioethics by B.G. Yudin (*Yudin, 2015: 28–32*), who used the theoretical method of inclusion and exclusivity in identifying the grounds for including and excluding Neuroethics in bioethics. It is noted that the naturalistic paradigm, in which the disciplinary ontology of Neuroethics is formed, dehumanizes it. The one-sidedness of narrowing the subject within the framework of applied and research ethics is noted.

The key concept for such a neuroscientific ethics is cognitive improvement, therefore it relies not only on a neurological explanation of the mechanisms of behavior, but on the ability to expand the possibilities of consciousness with the help of psychoactive substances and other technological possibilities that open up to neuroscience.

Naturalistic reductionism in the understanding of morality makes a person vulnerable in his right to self-identification, opens ways to control the individual. As an alternative, the approach to Neuroethics is chosen by M. Gazzaniga (*Gazzaniga, 2005*), who believes that it should be part of the philosophy of the brain. From this position, it is concluded that Neuroethics, in order to consistently develop bioethics, remain within the framework of an inclusive model and must introduce new dimensions of moral choice into bioethical discussions that appear in connection with new scientific data. Brain research reveals even greater complexity in the moral life of a person and society, especially in bioethical incidents, and affects the self-knowledge and self-identification of a person. It was preceded by the repressive capitalism of the industrial era, which formed disciplinary societies with moral prohibitions and diktat, which gave rise to feelings of guilt and, as a result, neuroses, for the treatment of which psychoanalysis appeared. In the era of “rich capitalism,” the moral imperative was replaced by a diametrically opposite one. A person has taken possession of the desire for self-realization and improvement; therefore, other diseases, such as depression and dementia, are characteristic of modern postindustrial and creative neurocapitalism (*Sidorova, 2015: 346–362*).

However, as E. Hess and H. Jokeit point out, unlike psychoanalysis, neurosciences are well funded by the government and pharmaceutical companies. Their distinguished status can be attributed to both the number and the magnitude of the problems they are trying to solve, as well as the widespread public acceptance of these problems and a decent profit if they are successful. In other words, neurosciences are produced by economic and epistemistic forces

emanating from today's capitalism" (*Hess, Jokeit, 2010: 1–11*). The modus of modern science, called "technoscience", is characterized by the fusion of business, laboratories and means of promoting innovations in the forge, warmed up by the success of modern technologies, and not least of all areas with the prefix neuro– (*Sidorova, 2015: 346 – 362*).

### 3. Discourse studying

The philosophical foundations of innovative educational processes are revealed in the research of such scientists as V. Bogdanov, E. Vinoslavskaya, S. Gessen, V. Zagvyazinsky, L. Karamushka, A. Prigogine, E. Rogers, V. Rozina, B. Simon, P. Sauch and others. To elucidate certain regularities in the course of the innovation process, the results of studies by J. Bassett, P. Drucker, O. Lorensov, I. Podlasogo, O. Khomeriki, A. Khutorsky, N. Yusufbekova and other scientists turned out to be important, in whose works the structural composition of the functioning model is presented. The development of innovative educational processes, taking into account their effectiveness and viability. All their developments have had a great impact on the understanding of scientific discourse.

The term "discourse" is mentioned in the philosophy of the ancient classics, for example, in the dialogues of Plato, who delineates the concept of a universal, integral, non-partial, non-individual, unified and discursive mind, which in its movement embraces and correlates separate meanings.

For its part, the linguistics of the text not only realized the integrity of the text, but also began to explore superphrasal stable unities or discourses, perceiving them as a mechanism for generating utterances and producing texts. In the center of linguists' attention, he concentrated on the problems of discourse as a complex communicative phenomenon, covering a number of non-linguistic factors (attitudes, goals of addressees, their opinions, self-esteem and assessment of the other) (*Van Dyck, 1989*).

The theory of discourse based on the doctrine of ideology and ideological formations of M. Foucault "The Archeology of Knowledge". It developed the doctrine of discursive formation as conditions for the functioning of specific discursive practices with their own rules, concepts and strategies. All humanitarian knowledge is conceived by him as an archaeological analysis of discursive practices, rooted not in the subject of cognition or activity, but in the anonymous will to knowledge, systematically forming the objects about which these discourses speak (*Foucault, 1996*).

In the XXth century, discourse began to be understood in a new way in the French philosophy of postmodernism and poststructuralism. According to this point of view, discourse is characterized by a special spiritual mood and ideological orientations, as it is expressed in a text that has coherence and integrity and immersed in socio-cultural, socio-psychological and other contexts.

The interpretation of the new vision of discourse in the philosophy of the 20th century is expressed in the fact that it is understood as a linguistic construction (language or text) developing in a monologue. But, at the same time, discourse is understood as a sequence of communicative acts (dialogue, conversation, written texts containing reciprocal links and dedicated to general topics, etc.).

Already by the end of the 1980s, discourse is beginning to be understood as a complex communicative phenomenon, a complex system of knowledge, which, in addition to the text, belongs to extralinguistic factors (knowledge about the world, opinions, attitudes, goals of the addressee, etc.) (*Kuranova, 2011*).

Associated with this is the tradition emanating from M. Foucault, which requires inclusion in the context of consideration of the discourse of power relations and other ideological

forms, under the influence of which the discourse acquires socially relevant significance. In this sense, even today discourses have important social consequences for individual countries and peoples, local and corporate social groups (*Chizhevskaya, 2011*).

Consequently, the word acquires the meaning of the language assigned by the subject in order to influence the listener, in other words, discourse for him is a characteristic of speech that the speaker assigns, in contrast to the narrative, which unfolds without the explicit intervention of the subject of the utterance (*Benveniste, 1985; Kuranova, 2011*).

#### 4. Teachers' discourse

To study the teachers' discourse it should be remained the typology, which can be explained by the existence of several criteria by which their types are distinguished: communicative and social, socio-demographic criteria, method and channel of communication, etc.

It is proposed to take different criteria as a basis for the classification of discourses (*Dyck, 2015, Pocheptsov, 1999*): appointment, information transmission channel, a way of communication, the number of participants in communication, verified / unverified, focus on the addressee, scope of operation, types of semiotic signs, etc.

In Ukrainian linguistics, G. Pocheptsov's classification is widely known, according to which they differentiate television and radio discourse, newspaper, theater, literary, film discourse, advertising, political, religious discourses, and public relations discourse (*Pocheptsov, 1999; Romanchenko, 2019*).

Other researchers add the following types: pedagogical, diplomatic, legal, virtual, aviation, international legal, software discourse (*Romanchenko A. P., 2019*).

Moreover, it can be noted: educational discourse is a discourse that directly concerns teachers and has the following characteristics:

- **by purpose:** the transfer of information, knowledge necessary for education; the participants in this discourse are, first of all, a teacher and a student (listener);
- **by the information transfer channel:** online / offline;
- **by the way of communication:** mainly monologue and delayed responses in the comments;
- **by the number of participants in communication:** unlimited;
- **by verification / unverified:** in the context of social networks is unverified;
- **by focus on the addressee:** full focus on the listener;
- **by the sphere of functioning:** lecture, discussion, colloquium, consultation, advice, presentation, seminar, laboratory and practical lesson and corresponding presentations of these genres in social networks, where, while maintaining a common strategic goal, they have, however, a specific idea;
- **by status qualification of participants:** status unqualified participants;
- **by chronotope of localization:** non-localized chronotope;
- **for purposes within a certain social institution:** in its most general form, the goal of educational discourse is formulated as a solution to scientific problems of a theoretical or applied nature;
- **for ritually:** fixed values
- **ritually:** fixed values (often due to commercialization);
- **for intentionally fixed strategies:** intentionally fixed strategies (these strategies differ from the classical scientific discourse and are dictated by the format of new educational platforms);
- **by the limited nomenclature of genres:** lecture, discussion, colloquium, consultation, advice, presentation, seminar, laboratory and practical, as well as an unlimited nomenclature

of genres (under the influence of modern educational platforms, new genres are formed or old ones are formatted);

– **according to a predetermined arsenal of precedent phenomena:** a predetermined arsenal of precedent phenomena (this arsenal significantly differs from the classical ones).

So, after analyzing modern educational discourse based on scientific articles in classical scientific journals, as well as LMS courses, telephone applications (Busuu, Doulingvo, Memrise, Drops, LinGo and the like), author blogs on social networks Facebook, Instagram, "TikTok" and "Youtube" in Ukraine, it can be roughly divided into 3 categories:

**1st category.** Classical educational discourse implemented in classical scientific institutions (universities, institutes) and well-established scientific genres (monographs, dissertations, scientific articles, etc.)

**2nd category.** It appeared under the influence of European and American scientific tradition. This category of discourse is characterized by a brighter "I" of the scientist, the absence of an observable reference to predecessors, a higher emotional coloring.

**3rd category.** Internet scientific discourse, which has become a complete product of scientists entering social networks. This category of discourse is characterized by high emotionality of presentation, excessive brevity of the format (up to 1 minute), sometimes completely unscientific (under the influence of media discourse and to attract the attention of other users)

These three categories often coexist in parallel, but their influence on each other remains to be investigated.

## 5. Conclusion

Teachers' discourse on socially informative and formal criteria refers to a type of communication that presupposes professional communication between persons belonging to the same group in a professional institution, in the center of which is the discursive activity of representatives of the scientific community, which ensures the embodiment of their intentions and the achievement of a perlocutionary effect. With the aim of transferring professional knowledge and for the intellectual and emotional impact on the addressee, where his essential characteristics reflect the general human, ethnic and interpersonal properties inherent in society and the scientific continuum, implemented within the framework of a social institution. However, a special category that radically changed its meaning under the pressure of network discourse is argumentation, the purpose of which is not to prove its position, but to gain approval from the audience.

From this point of view, and the influence that has the teachers' discourse Neuroethics is very important. All participants of this communication have to realize the impact of their contents and their information can change absolutely the concepts and way of thinking of followers.

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