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Meaning discourse analysis in Technological Civilization by relying on theories of Philosophy of Technology

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ABSTRACT
One of the most important crises that contemporary human faces it, is a crisis of meaninglessness which was formed in the era of industrial development and civilization on the basis of technological developments has found more specific and more complex view and is completely overshadowed the appearance of modern man, method of discovering, and understanding of concepts and meanings.This research analyzes the development discourse as a means of technological civilization, relying on the concepts and principles and theories of the philosophy of technology. To conduct this research is a qualitative research method based on Laclau and Muffe approach that is descriptive-analytic and critical at the same time. Research method is verbal and written interviews and questionnaires. Samples selected for interviews were philosophers (Iranian and non-Iranian) and experts with research areas related to technology.In this study, after the interview and introduction of texts, concept development discourse which is a subset of key discourses in the philosophy of technology, were analyzed and the results were presented in the form of the semantic system charts for each interviewee.
Keywords: Discourse analysis; Meaning; Meaning development; Technological civilization; Philosophy of technology

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INTRODUCTION

The Meaning of life is one of the most important philosophical, religious and psychological issue of human societies in the modern era and the era of industrialization and the development of comprehensive science and technology. Various schools to explore concepts and meanings in the modern and industrialized societies relied on the capitalist system, have offered various opinions. The certain point is that to find meaning in prior anything requires an understanding of nature and human nature; human is not alone in nature and therefore it cannot be achieved to understand him apart from the other things and human should be recognized in relation to other beings and in accordance with his place in the universe. Because this knowledge in time and space and different conditions of social, economic and cultural life are different, so the meaning of life has been different for various thinkers. One of the most important factors changing the contemporary human life is providing various technological and mechanical functions in many affairs; as far as has changed all the elements of human life and faced him with a new space and new rules in the world. Living in such a realistic atmosphere of technique, undoubtedly, will have a different impact on exploration method of concepts and meanings in human

mind in the industrial age and development of tools will create a new form of knowledge on method to obtain an understanding of the concepts and subjects. There is no doubt that human understanding and sense of concept from his perspective is not possible without recognition and understanding technology which form and give a consistency to human life in the modern age and therefore, it is necessary to analyze amount and type of impact on the way of discovering concepts in the human mind through understanding the evolution of technology through its historic changes. Scholars and experts in the field of philosophy of technology have referred to different concepts that based on it, we can comparatively analyze the most important factors affecting on the way of discovering meanings in a very advanced society in terms of technological growth as well as societies have much more primitive technology.

Research purposes

The overall goal of this study is to analyze meaningful discourse in technological civilization relying on theories of philosophy of technology **.**

Specific objectives of the study include:

1. A comparative study of philosophical approaches in relation to technology
2. Investigating he relationship between philosophy and technology from the audience perspective
3. Comparison the method of meaning in quite technologically advanced and primitive communities in terms of technological and technical development

MATERIAL AND METHODS

A) Methodology

The nature of this study and type of data are qualitative; the method of this research is functional in terms of objective. Also, the research method is critical discourse analysis in terms of data analysis that is conducted with an emphasis on Laclau and Mouffe approach. After explaining the study problem, which was based on aimless technique and technology creation,and determining the objectives and questions as well as the limits of time, place and topic of the study, literature, theoretical background and history of the subject were reviewed and accordingly, the conceptual model of the study and the subsequently questions in questionnaire was developed to conduct interviews with experts. After posing the question of research and interviewing with aware persons that was conducted verbally and in written form, implementation of texts and determination of primary and secondary signifiers and signified (the forms and contents of discourse), obtained results of discourse analysis were analyzed for each person in the form of charts of meaning system.

B) Statistical population of the study

The statistical population of the research consists of two groups of Iranian and Western philosophers who had translations or opinions in the field of technology philosophy and their research focus was the subject of this research. Iranian philosophers included several faculty members in Science Study Department at the Institute of Wisdom and Philosophy of Iran, Department of Philosophy of Science at the Institute for Humanities and Cultural Studies, Research Center for Scientific Policy Research, Technology Research Center, and Philosophy of Science Department of Islamic Azad University, Tehran Science and Research Branch.Western philosophers are three experts, researchers and university faculty members.

C) Sampling

In qualitative research, including discourse analysis, sampling rationale requires sampling of prominent people or theoretical sampling based on objectivethat in this study, after studying preliminary works related to the issue through consultation with relevant experts, prominent persons were selected using a sampling. Selected samples were chosen fromScience Study Department at the Institute of Wisdom and Philosophy of Iran, Department of Philosophy of Science at the Institute for Humanities and Cultural Studies, Research Center for Scientific Policy Research, Technology Research Center, and Philosophy of Science Department of Islamic Azad University, Tehran Science and Research Branch and three Western philosophers and experts.The all of these people who have the research experience (ranging from writing a book or writing and translating articles related to the Philosophy of Technology) and information about the subject of this study are considered key informants and chosen as sample.

D) Methods of data collection

In this study, to collect data, documentary and library research and field study methods have been used.In the library and documentary method, to collect data, comprehensive review of documentation, library resources such as books, student dissertation, encyclopedias, and reporting of research and scientific projects as well as searching websites and digital resources is carried out.In the field phase, verbal and written interviews using questionnaires were used to collect information.

E) Data collection tool

In the field study, after the formulation of questions with regard to the points mentioned in the theoretical model of research and using data collection tools including interviews and questionnaires, the required information has been collected.

F) Validity and reliability of the study

To assess the quality of research based on discourse analysis, taking into account criteria such as accuracy and predictability, continuity and internal communication, consistency and external coherence, power to unite various spheres of knowledge and simplicity or simplification is essential.To assess the reliability of qualitative research, techniques of accurate conducting the interview for collecting data, creating structured processes for implementation and interpretation of convergent interviews and utilizing the opinions of the specialized committees have been used.

G) Statistical analysis methods (data processing)

Data processing of the research was conducted by Laclau and Muffe discourse analysis approach. This data processing method is an analytic - descriptive and critical method. In fact, discourse is the possibility of the articulation and mental arrangement around a sign, signifier, forming a meaning system, consolidation and making it hegemonic by creating a temporary common consensus and persuasion. Discourse are closed and immutable affairs and redefine their own identity through the relationship that they have with other discourses. When the discourse was able to reach a relative stability and consolidate its meaning, will become a hegemonic discourse. The outcome of being hegemonic is a discourse meant highlighting the semantic system and marginalizing the other competitors. Discourse analysis consists of many diverse and complicated concepts; although these concepts have complexity, have a networking and chained communication with each other. It should be noted that each idea by relying on its own philosophical and fundamental principles, produces its own appropriate method and analyzes phenomena in the form of it. Laclau and Mouffe's discourse analysis approach used in this study is a descriptive and analytical way. Table 1 shows the components of discourse analysis by Laclau and Mouffe.

RESULTS

In this study, key discourse was the discourse of "philosophy of technology" which includes the subset of discourse of "meaning the development in technological civilization". It should be noted that the discourses under analysis have been as the result of studies of available resources and extracting key concepts from the texts by relying on mental ideas and principles. After conducting interviews (orally and written) texts were implemented, then, extraction of central and floating signifiers, signified ones, as well as other concepts brought in principles of Laclau and Muffe discourse analysis was done for each of the responses of interviewed statistical population and the results of designing the diagrams of discourse were presented in the form of a discourse semantic system graphs.

Meaning discourse analysis in technological civilization from the perspective of Shapour Etemad:

He believes life and shape of our understanding in the developing world from aspect of the advent of more advanced techniques and technologies has changed due to the internal and psychological transformations.

Meaning discourse analysis in technological civilization from the perspective of Musa Akrami:

Chart of the meaning development discourse semantic system in technological civilization from perspective of Akrami has three floating signifiers including the extent of community, a sense of satisfaction and the complexity of the society. According to Akrami, people who live in less and more advanced technological societies are completely different and their perception about the concepts of justice and liberty, etc. is definitely different. They live in a simpler world and have a simpler or complex perception about justice or have not no sense of justice. If the technology is quite governing and people are under its complete governance, undoubtedly, these people will lose their own inside and are converted to entities that ethical and deep concepts are meaningless for them. When such a human is alienated from others is estranged him/herself and infected with a variety of adverse reactions and illnesses. If we want to take an overall look, people in simpler technological society might live better and have more satisfaction. They have better satisfaction and feel better and have more emotional bond. But the question is, firstly, how long they can survive in this situation and how long they can live without the need of technology. Sooner or later there will be a relationship between the two groups and the first group or advanced and malignant technological group may impose itself to the simpler society.

1-Conceptual model of the study

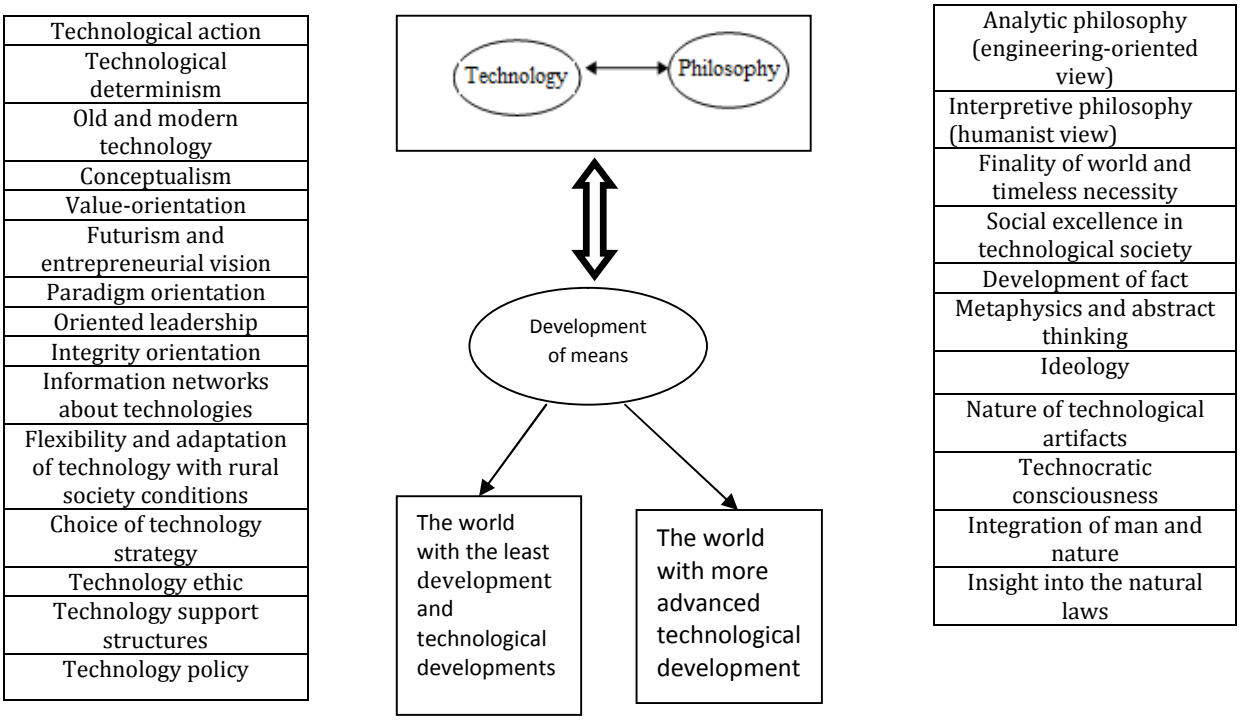
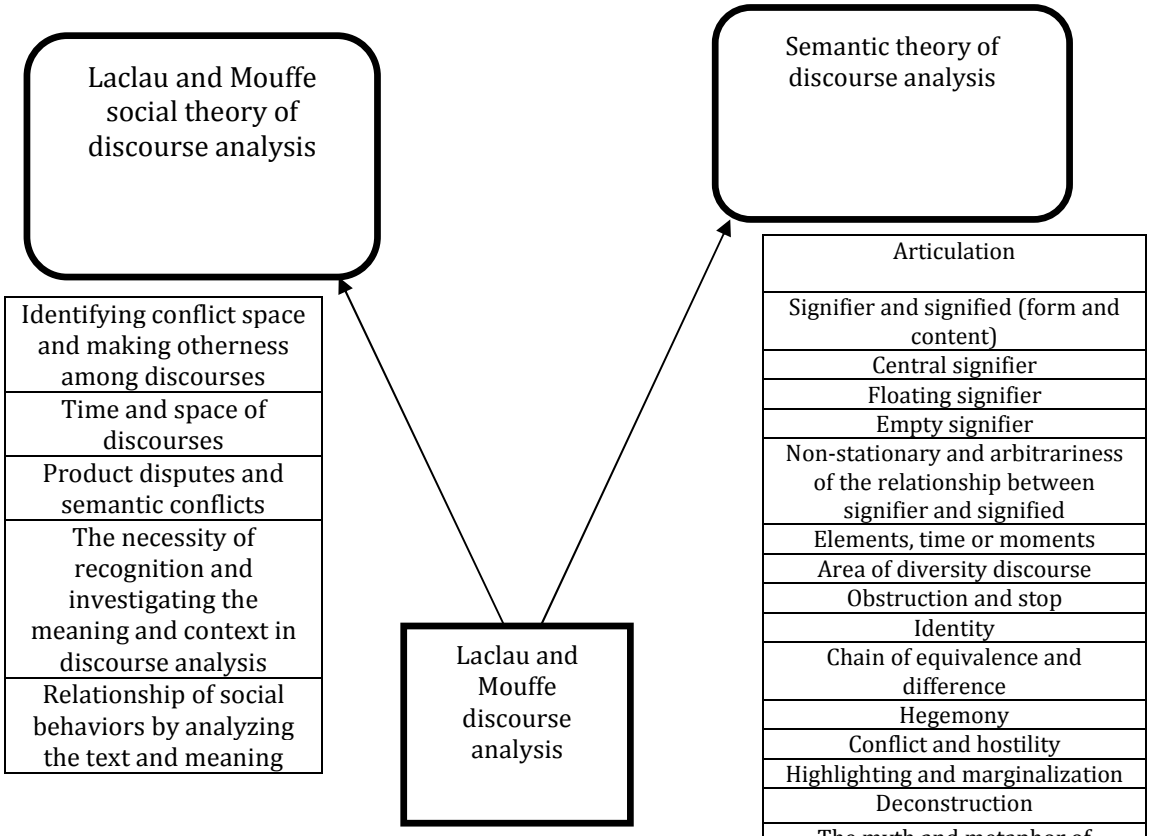


Table 1- Names, disciplines and the activity place of faculty members and philosophers

Names of faculty members and philosophers	**Discipline**	**The place of research and training activities**
Dr. Shapour Etemad	PhD of Cybernetics	Science study department at the Institute of Wisdom and Philosophy of Iran and translator of books and articles on philosophy of technology
Dr. Mousa Akrami	PhD in Philosophy of Science	Philosophy of science department, Islamic Azad University, Tehran Science and Research Branch
Dr. Hossein Sheikh Rezaei	PhD in Philosophy of Science	Science study Department at the Institute of Wisdom and Philosophy of Iran
Dr. Alireza Mansouri	PhD in Philosophy of Science and technology	Department of Philosophy of Science at the Institute for Humanities and Cultural Studies
Dr. Mahdi Moeinzadeh	Philosophy of Science and technology	Department of Philosophy of Science at the Institute for Humanities and Cultural Studies
Dr. Alireza Monajjemi	Philosophy of Science and technology	Department of Philosophy of Science at the Institute for Humanities and Cultural Studies
Dr. Amir Heidari	PhD in future studies	Department of Future Research at the Research Center for Scientific Policy Research
Dr. Arash Mousavi	PhD of science and technology policy	Department of Ethics at the Research Center for Scientific Policy Research
Dr. Hadi Samadi	Philosophy of Science	Philosophy of science department, Islamic Azad University, Tehran Science and Research Branch
Eng. Yaser Khoushnevis	MA in Philosophy of Science	Iran Technology Research Center researcher and expert and a member of Nanotechnology Institute, translator of books and articles on philosophy of technology
Dr. Ali Moazzemi	Philosophy of Science	Markaz Publication: Tehran
Prof. Andrew Feenberg	Ph.D in Philosophy of Technology	Canada Research Chair in Philosophy of Technology, School of Communication Simon Fraser University
Prof. Joseph Pitt	Ph.D in Philosophy of Science & Technology	College of Liberal Arts & Human Sciences, Virginia Tech, Department of Philosophy
Prof. McKenzie Wark	Ph.D in Western Philosophy	Professor of Culture and Media Studies; Eugene Lang College of Liberal Arts



Source: (Moghaddami, 2011)

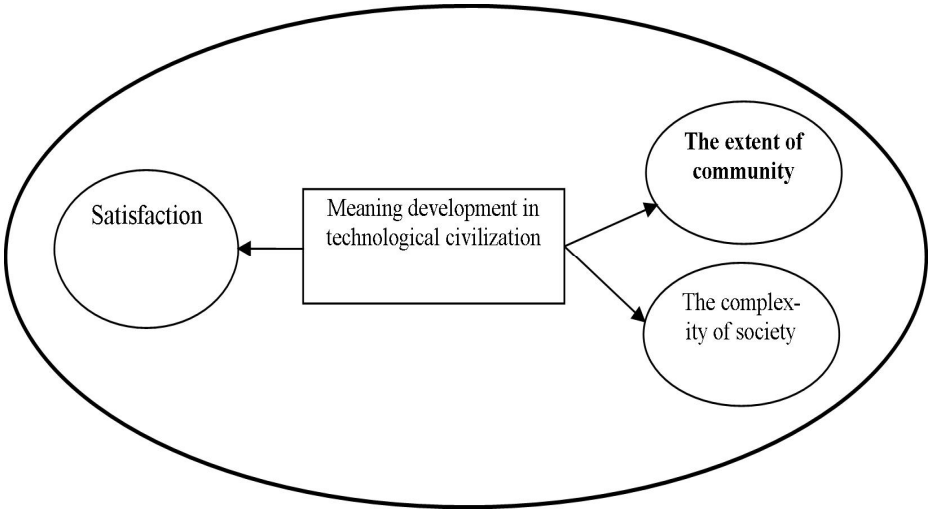


Figure 1: Semantic system of meaning development discourse in technological civilization in the philosophy of technology from the perspective of Musa Akrami

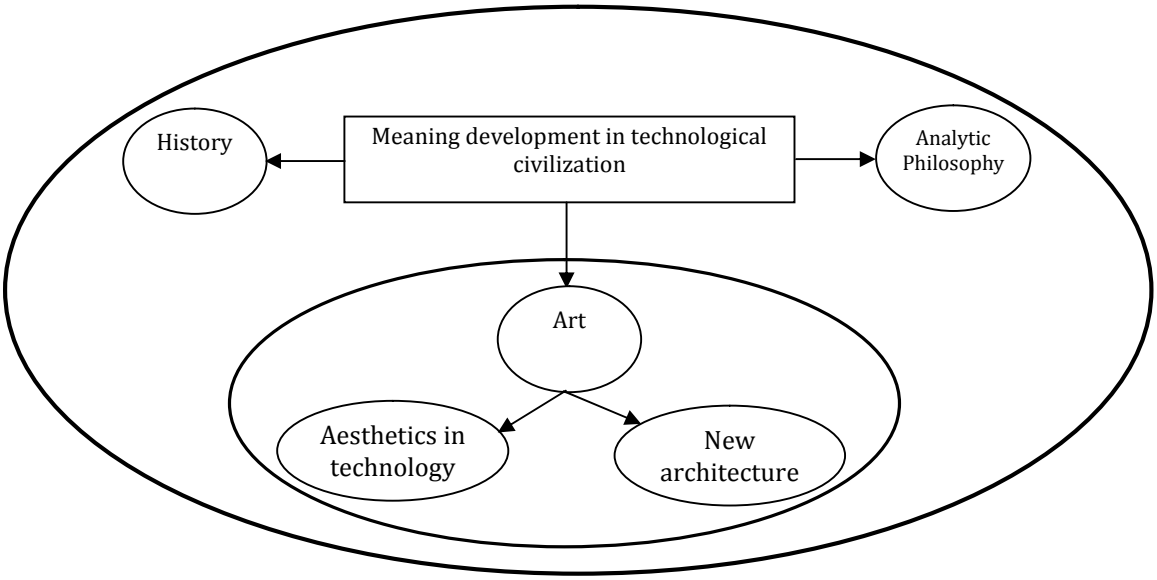
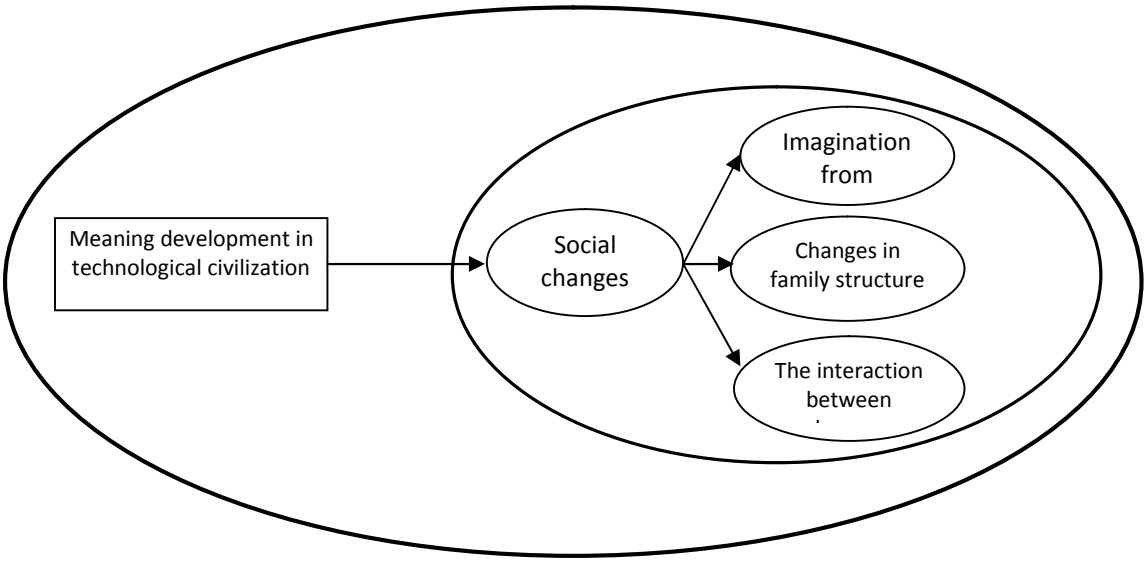


Figure 2: Semantic system of meaning development discourse in technological civilization in the philosophy of technology from the perspective of AlirezaMansouri



(Figure 3) Semantic system of meaning development discourse in technological civilization in the philosophy of technology from the perspective of AlirezaMonajjemi

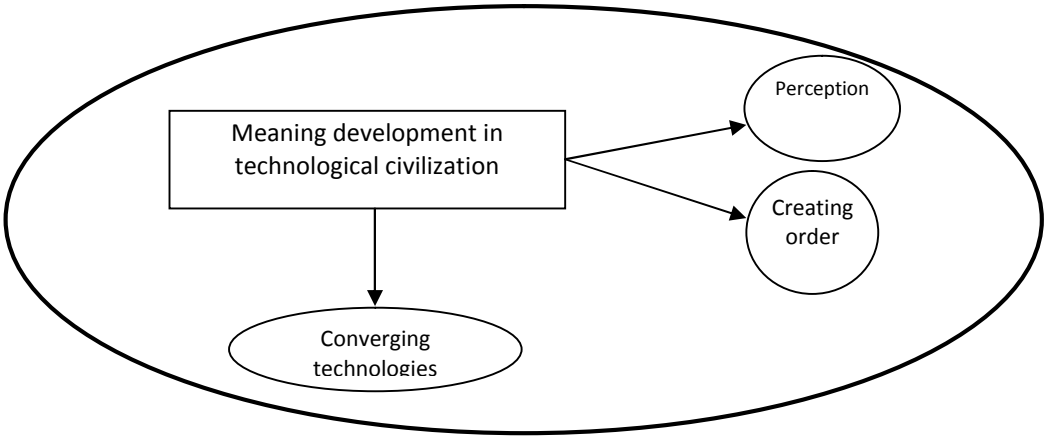


Figure 4: Semantic system of meaning development discourse in technological civilization in the philosophy of technology from the perspective of Amir Heidari

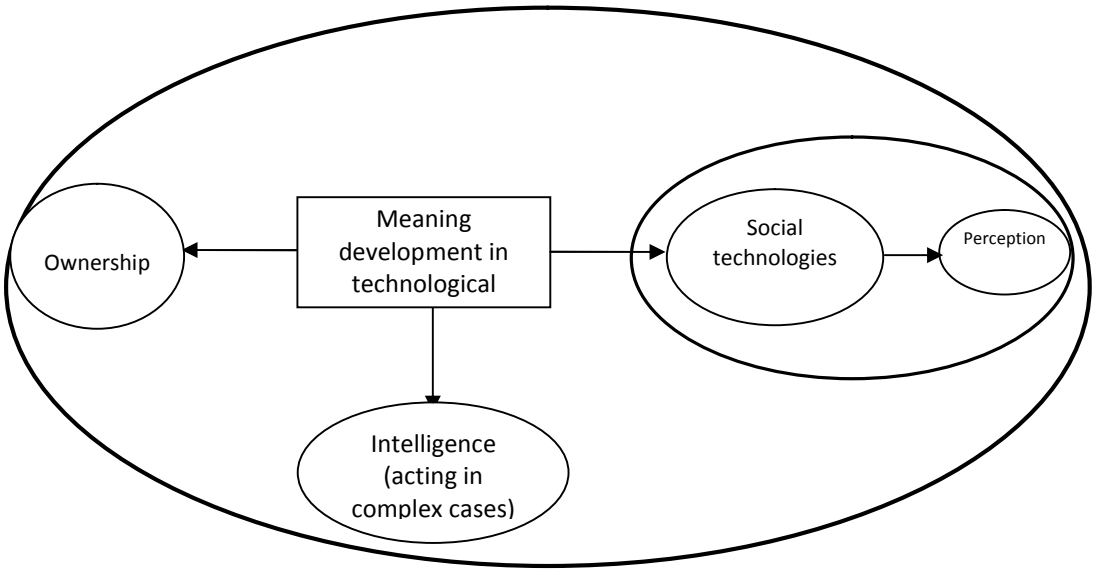


Figure 5: Semantic system of meaning development discourse in technological civilization in the philosophy of technology from the perspective of Hadi Samadi

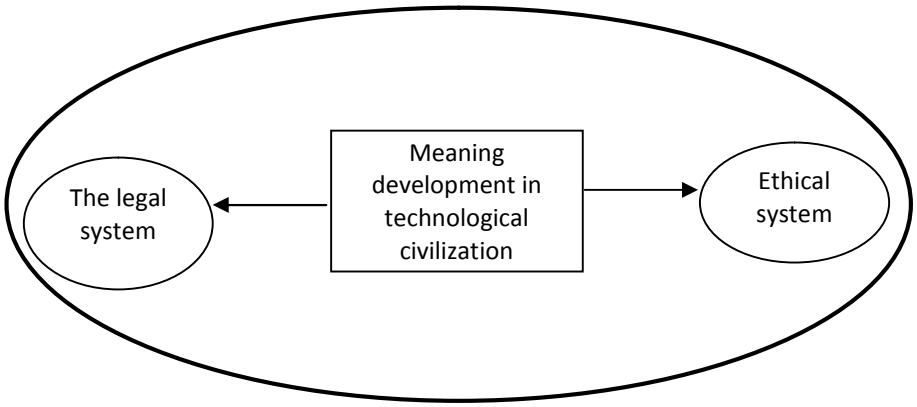


Figure 6: Semantic system of meaning development discourse in technological civilization in the philosophy of technology from the perspective of Hossein Sheikh Rezaei

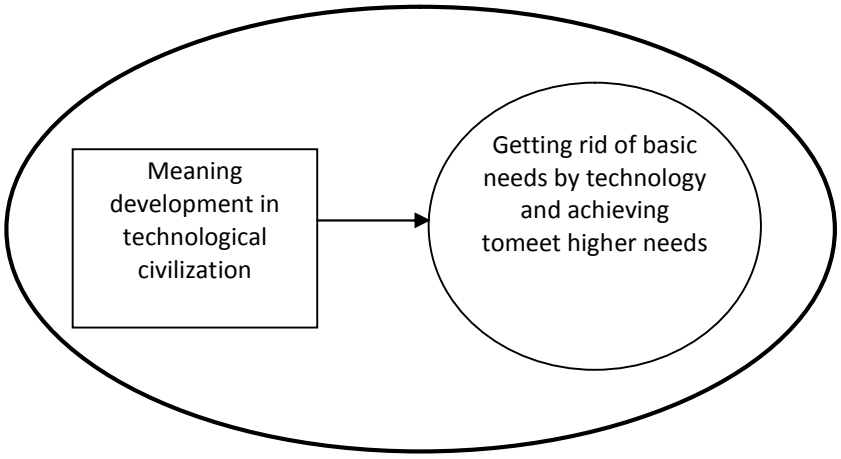


Figure 7: Semantic system of meaning development discourse in technological civilization in the philosophy of technology from the perspective of Arash Mousavi

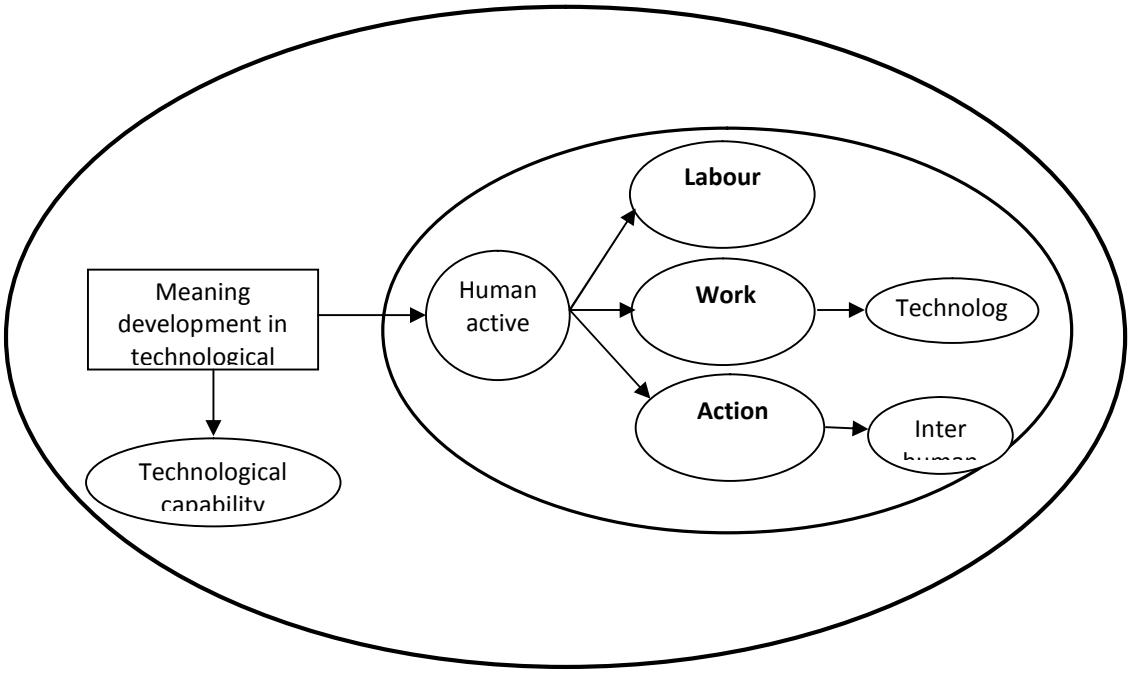


Figure 8: Semantic system of meaning development discourse in technological civilization in the philosophy of technology from the perspective of Ali Moazzami

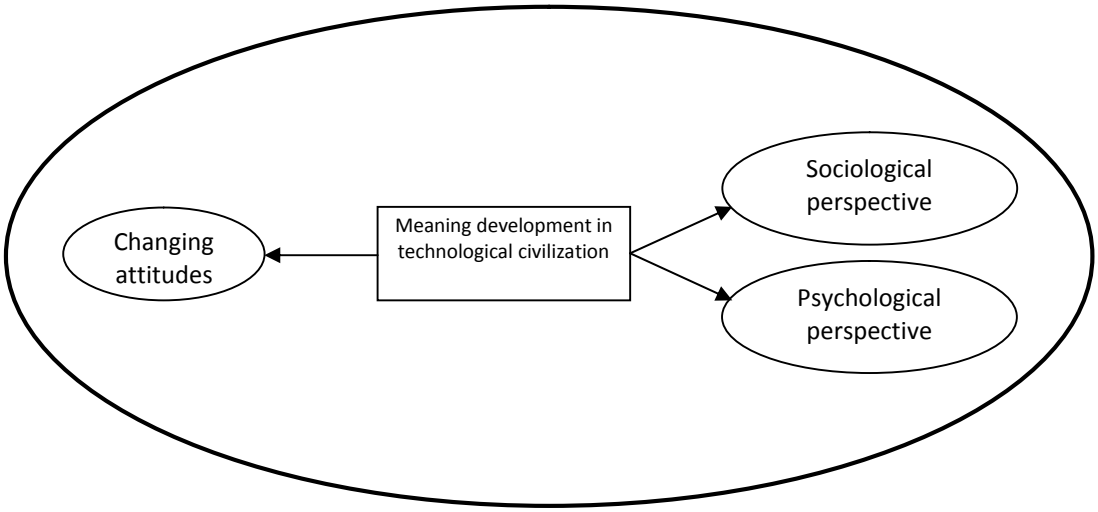


Figure 9: Semantic system of meaning development discourse in technological civilization in the philosophy of technology from the perspective of Yaser Khoshnevis

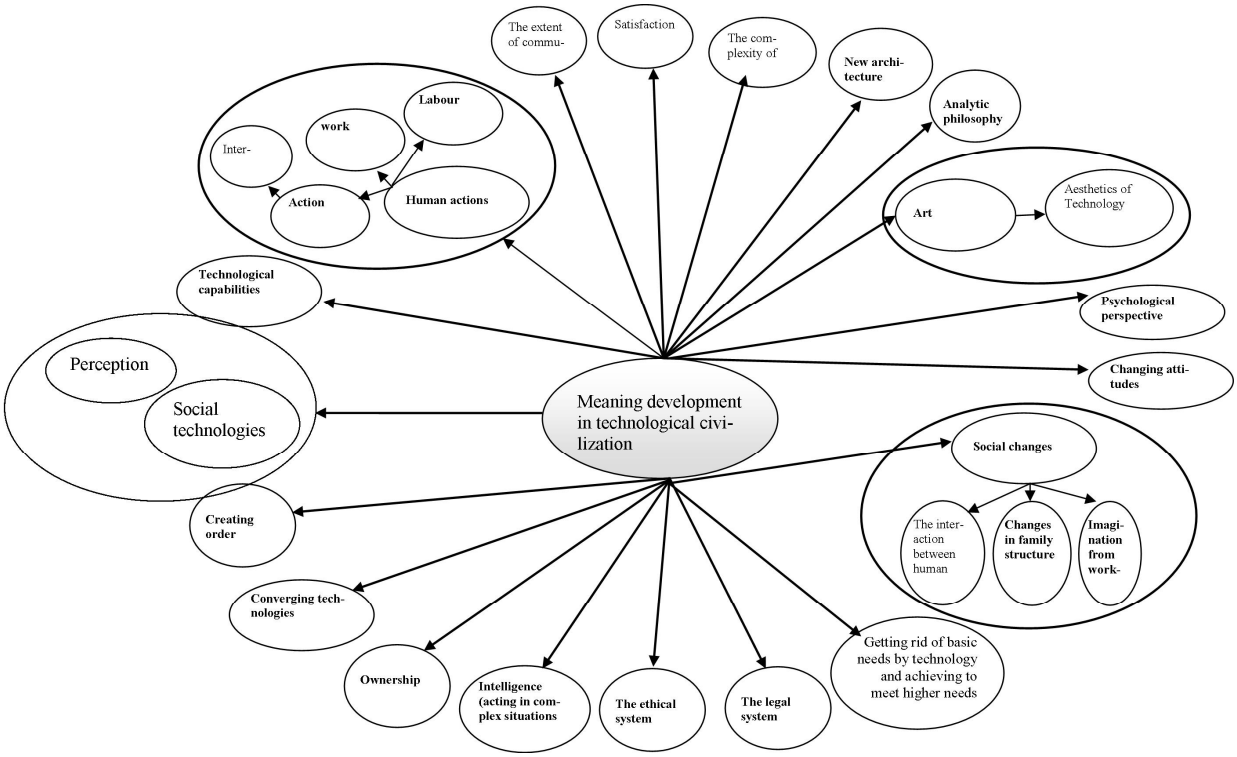


Figure 10: Combinational chart of semantic system of meaning development discourse in technological civilization

Meaning development discourse analysis in technological civilization from the perspective of Andrew Feenberg:

Feenberg believes that there is no difference in the way of understanding the meanings in the two technologically developed society and society with simpler technologyy.

Meaning development discourse analysis in technological civilization in technology philosophy from the perspective of Alireza Mansouri:

Meaning development discourse in technological civilization from the perspective of Alireza Mansouri has an articulation with the art signifier and the aesthetics signifieds in modern technology and architecture.The other signifiers include history and analytic philosophy which have located around the central signifier of meaning development and created specific discourse.

He believes that technology and technological civilization affect understanding and the way of meaning development by human. He also believes that as scientific views affect metaphysics and metaphysics can affect aesthetics, the same situation is true about technology. In the field of art or aesthetics, when the technology gets into the society, various issues can be concerned. Today, new types of art can be seen since human has aesthetic thoughts, involves these thoughts in the technologies. Mansouri has pointed to new architecture and believes that unlike imaginations, art and technology have many congruities with each other. Both art and technology are developmental in analytic views but each one explores the universe in a different way. The technology can be affected and also be effective from both art and aesthetic perspectives. He thinks that views that do not undergo such technological changes are rawer because they do not have new aesthetic experience. Emphasizing art in a space in which the technology has been grown and has played a role in individual expression and his/her oppositions Mansouri states that the more historical experience the society has and its performers have done proper and active actions, the richer their culture is.

Meaning development discourse analysis in technological civilization in technology philosophy from the perspective of Mahdi Moeinzadeh:

Mahdi Moeinzadeh believes that the way of meaning development in two less technological and advanced technological societies has no difference with each other. He says that for example if a primary society is far away from perfection, to the same extent an industrial society can be alike and there is no defect in technology.

Meaning development discourse analysis in technological civilization in technology philosophy from the perspective of Alireza Monajjemi:

Meaning development discourse in technological civilization from perspective of Monajjemi includes an articulation with a floating signifier of social changes which has three signifieds of imagination from job, family structure change, and human interactions and have created a specific discourse around meaning development discourse. He believes that the difference of individual imaginations from concepts cannot be assigned to the technology, because specific social changes have been occurred resulting in family structure change and creating change in the individual imagination from concepts such as job. Individual communications have move toward more individualism and imagination from values has been become different but all of these are not affected by the technology.

Meaning development discourse analysis in technological civilization in technology philosophy from the perspective of Amir Heidari:

Meaning development discourse in technological civilization from perspective of Amir Heidari consists of three floating signifiers of perception, creating order, and convergent technologies which have been located around the central signifier of meaning development and have formed his discourse. He believes that the way of use of technology is effective on our understanding and technologies despite the disorders created by incorrect applications can be tended to an overall order. The important point is that technologies are directed properly to create this superior perception. It is clear that the type of individual perception will be distinguishable from individual view. One of the important points that can be effective on meaning development in technological civilization is relying and focusing on convergent technologies which are multi-dimensions and are able to create several performance.

Meaning development discourse analysis in technological civilization in technology philosophy from the perspective of Hadi Samadi:

Meaning development discourse in technological civilization from perspective of Samadi includes an articulation with a signifier of social technologies and signified of perception as well as floating signifiers of intelligence like acting in complicated and ownership conditions which is located around the central signifier of meaning development. Pointing to hunter-seed picker tribes who live in Amazon and are not under the flag of private ownership, He stated that whatever a society is simpler, it can better create a relationship between justice and freedom. These tribes live in jungle and are strange on concept of ownership. He also says: whatever go ahead in human history, with the advent of cultures, positive events have also been occurred. Pointing to hunter-seed picker tribes, he says that there is no sign of Hafez and Shakespeare poems and Beethoven music. Because higher level of human encountering with the universe is created. Also, he believes that whatever population grows up injustice is spontaneously created. In his belief, technology can be useful in perception (especially social technologies). Social networks have both positive and negative capacities. Its negative face is that has made people away from each other physiologically. However. Its positive aspect is that has been at the service of solving problems. Attention to intelligence is one of other important cases in an advanced technological society for understanding meanings such as good, beautifulness, justice, etc. from perspective of Samadi, we need an intelligence to solve problems better but this is being insolvable for us due to technology.It was better the goal was this that we know sagacity as a tool for living happily. One of the definition of intelligence is acting in complicated situations. Today technologies have caused humans solve some of problems but it means that in fact abstract intelligence of human has been grown.

Meaning development discourse analysis in technological civilization in technology philosophy from the perspective of Hossein Sheikh Rezaei:

Meaning development discourse in technological civilization from perspective of Hossein Sheikh Rezaei includes two floating signifiers of ethical and legal systems which is located around the central signifier of meaning development. Sheikh Rezaei believes that etical and legal systems are completely in trade with technology. He emphasizes structuralism and believes that technology changes our list of rights and make us aware of our ethics. Sheikh Rezaei points to the role of infertility technologies for employed women and says technology has made fertility more predictable and some rules have been passed to make employment equal. In his belief, technology definitely has aaffected ethical and legal systems and also our imagination from ourselves.

Meaning development discourse analysis in technological civilization in technology philosophy from the perspective of Arash Mousavi:

Meaning development discourse in technological civilization from perspective of Arash Mousavi consists of a floating signifier of salvation from basic needs by technology and meeting higher needs which is located around the central meaning discourse. He believes in the role of technology in changing our perception and imagination and says: “technology and technologists never have a claim about discovering

fact, good, and anything like them. But, technology can free us from our basic needs to some extent. From the other side, technology can sometimes distract us from higher faces of life by being converted into the purpose.

Meaning development discourse analysis in technological civilization in technology philosophy from the perspective of McKenzie Wark:

Wark believes that there is not any non-technological society or world and all of things even a book are technology and question and analysis about extremity of trueness, good, beautifulness and justice are occurred in a technical territory in a special form.

Meaning development discourse analysis in technological civilization in technology philosophy from the perspective of Joseph Pitt:

Joseph Pitt announced that he has no certain response for this question.

Meaning development discourse analysis in technological civilization in technology philosophy from the perspective of Ali Moazzami:

Meaning development discourse in technological civilization from perspective of Ali Moazzami includes an articulation with signifier of human actions and signifieds of labor, work, and action as well as a floating signifier of technological ability placed around the central signifier of meaning development. He considers a categorization for the purpose of response and says: "Arnet has categorization between human actions so that he says on group of actions we do is labor. These are activities we do for the continuation of our life. The other group is work. These cause destruction and an important part of technology is placed here. Another human affair is called action. These are inter-human activities. What we call technology is work from Arnet viewpoint and action surely affects it. This spectrum of art, good, or beautifulness is originated from our interactions with the universe (from labor to inter-human action). He also believes that ability resulted from technology affects our imagination about good whether partial or overall. When you build a technology for a good and realize it, so another good is created and wanted in your imagination and this is a permanent interaction.

Meaning development discourse analysis in technological civilization in technology philosophy from the perspective of Yaser Khoshnevis:

Meaning development discourse in technological civilization from perspective of Yaser Khoshnevis includes three floating signifiers of sociological and psychological views and change of insight which are located in the central signifier of meaning development. He believes that technology and technological civilization are effective on perception and meaning development. He says: "technology is totally effective on human perception and meaning development and this that how we must have a case study. A new technology can change our view about many new things. It must be seen how it is in case study. For example, what is difference between the age with no PC in existence and nowadays? These needs sociological and psychological attempts.

DİSCUSSİON AND CONCLUSİONS

The total of results of analysis and investigating the texts resulted from doing interview with experts after combining the obtained concepts has been presented in a combinational diagram of semantic system of meaning development discourse in technological civilization. It must be noted that the combinational diagram has been obtained by merging the concepts available in discourse charts including all opinions of experts interviewed.

Combinational chart of semantic system of meaning development discourse in advanced technological field:

Totally, reactions of experts about determining the differences of meaning development in two fields of primary and advanced technologies are divided into three categories:

a) A group believed that technology does not affect our perception and many other factors are involved.

b) A group believed that technology is a new different, complicated and cognitional wave shading our perception and all of human life fundamentals and has changed it and by meeting some human needs has caused human to go toward more perfect requirements.

c) A group does not understand the difference between these two societies clearly and does not have any evident response.

In interpreting the differences of perception and developing concepts such as beautifulness, justice, good, meaning, etc. in the field of more advanced technological society compared to a primary and simple one, attention to following points has been drawn by experts:

*attention to the relationship between technology, art, and regarding aesthetic considerations

*attention to psychological characteristics of two considered societies and the differences of humans can be useful in understanding and meaning development.

*investigating the change route of people insights in both societies
*investigating the social changes occurred in both societies (considering individual imagination about job, change of family structure and human interactions)
*attention to the role of technology on salvation from basic needs and moving to higher ones
*attention to legal and ethical systems in both societies and assessment of the type and extent of performance of these systems and people in encountering conditions
*attention to the concept of intelligence as acting in complicated situations can indicate the difference of perception and individual encounter in both complex and simple societies in terms of the governance of technology
*governance of private ownership is effective on superiority of benefit and consequently on the field of technologies for earning more benefits. Investigating the life of primary tribes in simple societies without technology and ownership among them indicates that dispute and enmity are less between people, but a special perception has not been conducted in terms of understanding philosophical and deeper concepts.
*attention to more operative technologies and also social ones producing perception can be effective on improving human perception in societies with superior technologies.
*focusing on higher abilities obtained from technique and attention to analytic philosophy and the occurrence of changes such as new architecture indicate this that human has achieved a different perception by varying technologies and earning modern techniques that its sight is clear in all fields and man-made structures.
*human affairsare categorized into three groups of labor (i.e. necessary activities for continuing life), work (that results in destruction and technology is placed in this group), and finally action (that is related to inter-human activities). And the spectrum related to concepts such as art, good, and beautifulness is originated from interaction between human and the universe and in this reason it is placed in the spectrum of human activity or inter-human actions. Therefore, the type of perception in work space or technology will differ from that in the spectrum of human actions.

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I very kindly appreciate each of masters and experts who give me their valuable time for interview.

SUGGESTİONS
1-more focus of governments on supporting more social technologies that have been more effective on improving perception and awareness of people and less conflict with meaning development in technological life style.
2-modifying legal and ethical systems of the society in order to assess the type and effectiveness of various types of new technologies that enter community consumption cycle can be effective on preventing unwanted ethical, social, and psychological outcomes and plays a preventive role in the time of human crises.
3-adjusting ownership system in every society in a form that executive and legal systems can stand against intemperate people. Thus, in such a more moderate society, the possibility of perception and meaning development under the shadow of technological change can be more simply prepared.
4-getting help from more intelligent people in all stage of design and production to application of technologies and determining appendices related to social and cultural situation of every society can prepare foundation for better adjustment of technological development and consequently perception and discovering concepts and subjects from window of superior technologies.

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