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#### DIFFERENCES BETWEEN SOCIAL ENGINEERING AND SOCIO-CULTURAL DESIGN

Sergey V. Pirogov (a), Valeriya V. Kashpur (b)\*

\* Corresponding author

(a) Tomsk State University, 36 Lenin Ave., Tomsk, Russia 634050, pirogoff@ngs.ru  
(b) Tomsk State University, 36 Lenin Ave., Tomsk, Russia 634050, valkashpur@inbox.ru

#### Abstract

This article aims to show the differences between social engineering and socio-cultural design both in their purposes and in their cognitive tools. The differences in the philosophical principles underlying these two forms of design are analysed. It is argued that the differences between social engineering and socio-cultural design can be summarised in 10 theses. The principal differences here are the following: technology is not a simple means to achieve people's goals, but a form of world outlook and a way of organizing life activity; the new is not an improved old, but a fundamentally different socio-cultural project; socio-cultural design uses schemes for analyzing situations, for organizing joint activities, for constructing a new reality, for the use of new ideas rather than the knowledge of the properties and constructive qualities of social objects. The key idea of the theses is that design always takes place in a specific socio-cultural environment, so successful social transformations and new social technologies are impossible without self-consciousness, self-determination and construction of the very subjects of design. The success of the project depends on the common intentions of the designer and the project user developed in the process of communication.

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#### 1. Introduction

The very term social engineering first appeared in the 1920s (S. and B. Webb, R. Pound, K. Popper) and back then, denoted gradual, step-by-step changes. Social engineering is aimed at the search for technological means and ways of implementing ideals and goals. Popper emphasised the active and rationalistic nature of human action, that man is the master of his own destiny and that any goal can be set



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and, most importantly, implemented (Popper, 1992). Social engineering seeks to link social ideals and the rationalistic thinking, to find ways to harmonise science and morality. However, the XXth century saw increasing failures in the implementation of major socio-technical projects. The fact is that the condition of a viable project is the concurrence of the intention and the plan of both the designer and the user of this design, which requires an inter-subjective understanding of the situation. Therefore, socio-cultural design, along with the technical and morphological patterns of the object design, develops patterns of a different type: situation analysis patterns and scenarios as patterns of organising joint actions to implement the plan.

The main idea of the article is that the key difference between a social engineering construct and a socio-cultural project consists in the fact that the latter contains the semantic component of the model of the future. In a socio-cultural project, a technical construct is only an infrastructure component of the project, development of a device to implement sense. Socio-cultural design is based on a different design philosophy, the main principles of which are: 1) reflection on the value bases and impacts of the project, 2) the doctrine of public involvement: public participation in the elaboration and adoption of project solutions. This new design philosophy manifested itself, in particular, in the rejection of the practice of urban development based on the idea that there exists a "rational" city. City design saw a transition from a functional to environmental approach.

## 2. Methods

The Russian theory and practice have developed two most advanced approaches to socio-cultural design: problem-oriented (Dridze, 1994) and subject-oriented (thesaurus) (Lukov, 2003).

The problem-oriented approach is based on the postulate that different actors of socio-cultural design understand a situation in different ways, and social projects should aim to develop diverse samples of solutions for both current and future social problems. It is assumed here that the objective characteristics of a situation and its interpretation by different actors are not identical, yet when making a decision both should be considered. It is about the role of sociologists in the implementation of the so-called doctrine of social participation, i.e. "participation of all stakeholders interested in working out decisions that affect their lives by permanently expanding the "communicative circle" and gradually involving more people with their "different motivations" for criteria for assessing social situations and socially significant decisions" (Dridze, 1994). It seems that the internal policy based on the doctrine of social participation is the only possible way to social integration in our society today.

In the context of this methodology, a socio-cultural project can be an engineering urban development project, a company or a territory development program, a plan to reorganize the administrative and management structure of an enterprise, modification of the old or development of new legal acts. The difference between socio-cultural and engineering projects here is that socio-cultural projects do not have a local institutional value; they significantly change the habitat of people, affect their dignity and interests, impact the quality and way of life.

Accordingly, the theoretical object of socio-cultural design is the multi-dimensional socio-cultural "space-time", or the "chronotope". The content of the concept is based on the ideas of Einstein,

Minkowski, Ukhtomsky, Bakhtin, Florensky. In socio-cultural design, the chronotope is the unity of the spatial and temporal parameters organized by the sense of the perceiver, simultaneously a spiritual and material reality, the center of which is the person organizing this reality according to their semantic perspective.

The subject-oriented (thesaurus) approach is based on the postulate that the image of the future is sensitive to semantic means of its construction, and the source of the project is the value system and the thesaurus of its developer. Thesaurus is a semiotically structured idea, image of the surrounding reality expressed by a certain language. "Be it a more advanced architecture of living environment in the neighborhood or a tour for wheelchair users, a new educational program or an amateur theater, every social project has an initial understanding of the meaning and purpose of the proposed innovation (spontaneously occurring innovations are not social projects); thus, it is based on certain philosophical and sociological concepts of the world and man, even if it is not reflected in documents on the project" (Lukov, 2003).

Based on the problem-oriented methodology, an algorithm of problem diagnostics was developed; it includes the following questions: How do different participants of a specific social situation see it? What is the subject area of the problem: financial, organizational, administrative, legal, political, etc.? What will happen (which processes can take place) if the problem is not resolved? What are sample solutions to the problem and how do they differ? Which resources exist to solve the problem today and which can be found? What is the expected social impact of making a project decision? What are the possible social and environmental costs and positive results (consequences) of the proposed method of solving the problem?

Based on the subject-oriented (thesaurus) approach the phenomenological analysis of projects is used as a method; it includes the following questions: What is the purpose of the project? How can it improve the environment and lifestyles? Who questions the need in the project in its current form, here and now, and why? Whose interests and fates will the project affect and how? Who is the partner in dialogues while the project is being prepared and implemented? Who is the investor, the customer, the executor of the project, and what are their resources? What are the project participants' responsibilities? What negative consequences are possible? How will they be compensated for?

### **3. Results and Discussion**

Specific differences between social engineering and socio-cultural design can be summarised in ten theses.

Thesis 1. Technology is a condition for innovation, but it is more than just a means to achieve human goals: the "technical" is a form of life philosophy and a way of life organisation that contains both positive and negative aspects. Existentialist philosophers Martin Heidegger and José Ortega y Gasset elaborated this thesis.

Heidegger developed the idea that the essence of technology is not something technical; it does not exist in an artefact, but in the way of reasoning and in the image of the world that emerged in the modern era. According to Heidegger, hypertrophied rationality, confidence in the possibility of implementing any sci-tech project means not only the increased instrumental power of man, but also the weakening of the

axiological content of projects. Projects may lack the "call of being", i.e. desire for creative self-fulfilment, self-development, for transcendence as rising above utilitarian needs. This is where man is in danger, for in the awareness of his domination over the world around man, in fact, does not see himself in himself as he is in the power of *Gestell*, a "supplying production» that makes man risk to reject his free nature. There is a loss of the axiological component of the project. This is evident when projects clearly show the predominance of the rational-technical component and the weakening of the axiological one, when calculating representation blocks the horizon of the meaning of life. The final question of technology, according to Heidegger, is the question of the impact of built environment on the life of man and especially on his definitions of sense and goals. The thing is not limited to its functional utility; it always has a plan as a project of social relations and as sense of a human action. Technology construction begins with the development of an ideal project, a plan for a life form – a form of attitude to the world and man. Control over technology is control over a form of life, over projects of transformation of life; it is a form, method and means of implementing power. Heidegger noted the ability of technical rationality to transform means into goals, to standardise human behaviour and, as a consequence, make man the object of "calculations and manipulations" (Heidegger, 1993).

Ortega y Gasset showed that every human project, every life has its own technology (Ortega y Gasset, 2000). If a man is a creature whose being is something non-existing yet, i.e. a pure project, plan, programme of one's own being, technology is the variable function of the human program. The idea of life, of prosperity changed an infinite number of times, and at times so radically that the so-called "technological advances" were ignored and forgotten. Technology is extremely changeable and unstable as it depends entirely on the representations of prosperity that each historical epoch has. The mission of technology is the liberation of man, granting him an opportunity to fully be himself, but technology is not able to determine the content of life.

Thesis 2. Social engineering is the extrapolation of the principles of logic and technical engineering; social innovation in social engineering is based on engineering methodology. To understand the essence of social engineering, it is necessary to briefly explain the essence of technical engineering. The idea of engineering is the idea of the embeddedness of natural processes in a technical device (artefact), which allows man to include devices in his own activities and to increase his power immeasurably. The purpose of engineering is to design an artefact that allows the use (application) of a certain objective (natural) process (Gorokhov, 1987). The content of engineering is to find (create) optimal structural and morphological parameters of an artefact (technical construction) for a natural process to occur (Cheshev, 1981). Thus, the methodological principles of engineering are the principle of compliance of processes and morphological conditions, or functions and structure, and of designing by prototypes, by samples.

Methodological principles of social engineering as an extrapolation of the principles and logic of technical engineering are the following postulates. Firstly, there exist objective phenomena and processes and, therefore, the true and universal laws of building (construction) of new objects. In relation to social actions and objects, there exists the unchanging human nature (man's qualities, needs and goals). Secondly, the scientific and engineering approach derives from the fact that the social reformer is a social engineer, the demiurge, and social life is a passive object of the demiurge's activities. Thirdly, the new is the improved old. The basis of design innovations in social engineering are: 1) new knowledge (scientific development), 2) new goals (change of ideology).

"The scientific approach to innovation is based on the theses that since things were made, and they can, if you know how they were made, be remade. It is this social engineering idea that inspired Marx, and continues to guide many of today's reformers. But the whole historical experience of social reforms shows that the idea is not correct. Actions of the reformer may be completely paralysed if he does not know and does not understand where society is moving and how social action participants can behave. Since the 1920s, there has been a permanent discrepancy between the conception and implementation of projects" (Rozin, 2002). The belief that major social problems can be solved on the basis of technology is becoming an increasingly destructive moment. Fedotova shows the crucial importance of the definition of the substantive aspect of modernisation transformations, i.e. the discussion of the sense of transformations, of the experience of successful and unsuccessful reforms, their resources, the price of the changes, of the civilisational and cultural restrictions and conditions that allow acting in concert, etc. (Fedotova, 2002).

Thesis 3. Methodological shortcomings of social engineering are: the elimination of the population from the design process; attitude to the population as one of the elements of the social system (professional and demographic); administrative (theoretical) design. The main negative result of the social engineering logic is that the designer determines the whole structure of life for the user.

Thesis 4. A successful social transformation and new social technology development are essentially impossible without self-consciousness, self-determination and constituting of the subjects of social action. A social action is different from an engineering one as it primarily includes goal-setting based on the determination of the current situation. The problem of the "engineering" reforms of society is that the reformers' objectives do not concur with the situation, and the objectives and results do not coincide.

Thesis 5. Socio-cultural design is designing a new quality of social life rather than a new object. A socio-cultural project is a project of a desired state developed in the process of communication rather than a rational construct of an optimal state from the point of view of an expert in any field.

In the process of communication, socio-cultural design aims at creating a vision of the future, common to people living together, as a project of a desired and acceptable state of life. A socio-cultural project is not a scientific and rational construct of an optimal state from experts' points of view, but rationalisation of the dream of a better life, reflection on how to translate it into reality with the help of other people. A socio-cultural project is a joint life project. Dialogue is the main condition of socio-cultural design. There is a completely new reality no one has ever thought of. It is the idea that the design process as the process of modelling, making of the future *state*, not the object, is only possible in the dialogue mode. There is a colossal paradigmatic shift in the mindset from "I know best, I can do the best" to "of course, I know something, I can do something, but I can develop an implementation model of a new situation only together with people who will live in this situation, who will create it" (Glazychev, 2001).

Thesis 6. A feature of the space organisation of socio-cultural design is the introduction of the ideology of participation: designing involves the user and other stakeholders. In this, "portraits" of potential users are modelled. In socio-cultural design, the project addresses an equal designing participant. The difference between social engineering and socio-cultural projects is in the difference between the different types of discourses – prescriptive and communicative.

Thesis 7. The object of socio-cultural design is specific. The object of social impact does not look like a natural one. He is active, reflexive, can formulate his own goals, try to implement them; on occasion, he can assimilate the "reformer". The role of the reformer is that he triggers, initiates some processes of changes that develop in their immanent logic. Almost all modern social changes in the world went out of control of their initiators.

Thesis 8. The cognitive tools of socio-cultural design are specific. They are situation analysis and joint activity patterns, schemes of constructing a new reality, of applying new ideas rather than knowledge of the features and structural properties of social objects. Social engineering involves humanitarian ideas and artistic constructions, creates ontological pictures.

Thesis 9. Socio-cultural design is based on the situation analysis that is the study and diagnosis of processes occurring in specific socio-cultural situations. Each field of socio-cultural environment consists of three components: the object-spatial environment of man; the socio-structural situation: the system of social groups and institutions, the system of relations prevailing in the given socio-cultural environment; the value-oriented component: the axiology of the elements of the environment. "The socio-cultural situation is a multi-dimensional socio-cultural space in which man lives and which reflects the totality of his living conditions. It includes: 1) cultural and historical heritage; 2) artistic environment; 3) social and psychological environment; 4) spiritual and moral environment; 5) political environment; 6) ecological environment" (Markov, & Birzhenyuk, 1997).

Thesis 10. Communication is the condition and mode of socio-cultural design. A common mechanism of innovation, i.e. emergence of new projects of joint life, lifestyles, behaviour patterns, etc. is communication as a process of harmonisation of values of objects intentional activity and meanings of situations. For example, in urban environment, the new results from a spontaneous, unexpected, unplanned collision and a subsequent interaction of different elements. The object and semantic chaos of urban environment is a direct synergistic mechanism of city development. The chaos of city life here is the generator of randomness and diversity that constructs a new unity, generates a new structure. "The most important condition for balanced urban development, as the experience of European and American cities shows, is the consensus between the different urban communities and the management system on priority areas of development. Achieving this consensus is possible with the solution of priority tasks aimed at the development and maintenance of public self-government, change of the intra-city management system, so that the governing bodies are maximally close and accountable to the people and controlled by them, which ensures the transparency of local self-government bodies" (Alekseev, 1998).

#### 4. Conclusions

The key idea of the article is that design always takes place in a specific socio-cultural environment, so successful social transformations and new social technologies are impossible without self-consciousness, self-determination and construction of the very subjects of design. The success of the project depends on the common intentions of the designer and the project user developed in the process of communication.

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