

Particularities and Nature of Space Projects: Engineering or Social Architecture?¹

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The article raises the issue of the nature of space projects. Some of them were implemented, but most remained on paper. On the one hand, the author discusses specific features of nonconventional social engineering to which he, in particular, refers space projects, and on the other hand – the successful social Donor Project. He demonstrates that the designer cannot rely on existing prototypes in nonconventional design. Therefore, he/she is compelled to constitute the object being designed. To characterize the processes being developed and conditions defining them, he/she has to conduct researches and formulate concepts of these processes, to form the environment and the strategy of implementation of the project. Besides, nonconventional design implies the formation of a number of new kinds of activity (involvement of users in the designing, complex management, expert examination of projects, etc.). The analysis of the Donor Project made it possible to identify such conditions of success of this project as sound financial support, efficient project management, availability of administrative resource, methodological support, and interest of the main social subjects in its implementation. The author used characteristics of nonconventional and social design revealed in the analysis in the second part of the article at the discussion of space projects. He considers conditions under which such projects may be developed and implemented. The Donor Project could be developed and implemented due to creating a number of unique conditions, but in terms of scale, this project is nothing compared to space projects. Though the author shows the problematical character of the development of space projects – as yet there are no necessary conditions required for their implementation – he deems it necessary to continue to work on them, keeping in mind that it is a matter of nonconventional and social design.

Keywords: designing, space, implementation, conditions, environment, schemes, methodology, support, sociality

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Design context of the development of space projects

We have long got used to such expressions like “nuclear project,” “Moon flight project,” “Mars development project,” “interstellar travels projects,” etc. Suppose the first two projects were successfully implemented, meaning that the result obtained was the same as conceived. In that case, the other projects are still at the stage of preparation or, like the latter, in general, are problematic. As Hanna Arendt writes, we are not going to fly anywhere out of the limits of the solar system in the nearest future, and it is hardly possible in general ². If we speak about projects, obviously, it is implied that they can be implemented, or, rather, that they are conceived so that they could be implemented in strict accordance with the design. However, it is not always possible. There are also other questions. Can everything be designed (for instance, can life on Mars or interstellar travel be designed)? What is, in general, “a project”? Is an implementation which allows to create an object matching precisely the project is obligatory for designing or it is enough just to create some object, in particular, one significantly different from ideas and solutions of the project (by the way, currently there are more than a few of such projects and quite large ones)?

Already in the early days of the formation of modern design at the beginning of the last century, architect Vereshchagin wrote, “We perfectly feel that architectural requirements may and must be imposed not only on buildings, but also on any thing, any person and his/her face. Nowadays, not only new plants, but also new culture and a new person are under construction” (Vereshchagin, 1928: 130). Suppose we follow the definition of the project given by methodologist Yuri Gromyko. In that case, a project is without fail a controlled and regulated creation of a new (essentially new quality of life, sociality, and object) for the development of the public activity. “Possibility, Gromyko writes, proceeding from any situational case, to find the best on the basis of thinking and in the thinking itself: the best destiny, the best name, the best state – that is the normalizing and the guiding part of any design thinking (...) The main result of the design thought communication acts of representatives of various mental activity systems is a manifestation of new types of public communication actually maintained by a communicating designer. These new communications arise because the designer introduces a standard vision of the future into the consciousness of communicants (...) Designing is such a peculiar type of mental activity in the context of which ideal structures and idealizations (...) maybe each time redefined on the basis of the situational vision” (Gromyko, 1997: 20, 63, 78).

I refer such understanding of design to social design, and I show that though for the latter, the implementation-oriented *set* is accepted, the object created during the implementation of the project may strongly differ from characteristics of this object specified in the project (Rozin, 2018: 62, 84-87). In this sense, an interstellar travel project may be considered a project even if it is impossible to organize such travel on its basis. So far, it is so. The question is, whether such projects may suit us? After all, it is desirable, probably, that their implementation shall allow creating objects the characteristics of which are close to those specified in the project, for example, such as the Moon flight project.

There are few successful projects like lunar. Therefore, it is difficult to understand what features distinguish them from usual projects or so-called “paper” projects representing designers’ imaginations who consciously ignore the implementation issue. After all, successful

² “Of course, Hanna Arendt notices, in our plans nowadays is no more than the survey of the immediately surrounding part of the Universe, the infinitely-small area that the mankind only can reach, even moving with a speed of light. Considering the duration of human life – the only absolute restriction which remained at the moment – it is very improbable that we will ever reach much further” (Arendt, 2014: 403).

social projects do exist, and the main thing is that scientific reflection of such projects is there. One of them belongs to the author who analysed a big project, “Development of Mass Gratuitous Blood Donorship” (hereinafter referred to as the “Donor Project”) (Rozin et al., 2010). Besides, the solution of our task is facilitated by the design genesis carried out by the author. It makes it possible to understand the difference between space projects and usual ones and their specific features. We will also rely on these two types of research. Let us start with the design genesis.

The design was formed as an independent kind of activity and practice at the beginning of the last century. I called this type of design “conventional” (Rozin, 2018: 16-68). As I show, it has the following specific features.

1. Division of labour between the design and the production (creation of the project and its implementation) and inside the design itself.
2. Development of a product completely in the semiotics plane using schemes, models, designing rules and standards as well as process guides.³
3. Representation of an object being designed in terms of *processes* (natural modality), *material conditions*, which ensure these processes, and *creation* of these conditions (artificial modality).
4. Expansion of the concept “process” on four types of processes: processes of the first nature, aesthetic processes, life-activity processes and technological processes.
5. Description of the *functioning* of the object being designed with simultaneous development of its *design* that implies correlation of functions with the design (action of the principle of compliance⁴), as well as defining stages and particularities of *production*.
6. Rationing of processes and material conditions⁵. Whereas processes and first-level conditions determining them (stability and durability of design, electric, heat,

³ “During the present era, one of the first methodologists of design A.V. Rosenberg writes, of development of technology, a project is developed so “detailed” (and sometimes is accompanied by a model) that the real construction is carried out automatically (i.e., directly according to the project without additional alterations and calculations. – V.R.), including its decorative details. But there was time when the architect previously established only a general plan, applying it in general to paper, and all detailed development of the project was performed along with construction of the building at site” (Rosenberg, 1930: 17).

⁴ Here is how Alexander Rosenberg formulates the principle of compliance, calling it the basic principle of design of architectural structures. “From the theory of organization it is clear what role has the environment for correct progress of the process: it has to match the progress of the process and to create conditions under which basic principles of organization of the process are complied with. Therefore, an architectural structure which is an environment of the process shall match the process organised therein, or, putting it in other way, an architectural structure, its forms, dimensions, its layout in space in general and that of its parts and its materials depend on particularities of the process for which it serves as an environment. This is the basic principle of design of architectural structures” (Rosenberg, 1930: 9).

⁵ “While the organizer provides standards and schematic diagram of the process, the architect provides standards and schematic diagram of the building. Final results of their interaction are in a complex functional dependence upon specific parameters preset” (Rosenberg, 1930: 192). Rosenberg takes the concepts “process” and “organization” from Alexander Bogdanov’s work “Tectology.” The latter defines this discipline as follows, “We shall call general organizational science “tectology.” Translated from Greek, this means “a theory of construction”. “Construction” is a synonym for modern concept “organization” (...) We see that human activity – from its most simple to most complex forms – is reduced to organizing processes” (Bogdanov, 1921: 20, 22). Following Bogdanov, Rosenberg calls development of processes “organization”, the designer acting in this role, “organizer,” and expands the idea of structures upto the concept of “environment” (“facility”). Rosenberg understands an object being designed as a “complex” or a “system” (in “Tectology” this is the main object of studying and organization).

technical conditions, etc.) are defined on the basis of respective technical sciences, such processes as, for example, activity processes, aesthetic, technological processes, etc. are set by means of norms. When developing the latter, the established practices and requirements proceeding from various subjects: state, society, departments, influential people, designers are taken into account.

Almost at once, the expansion of the design ideology (i.e., conscious patterns and principles of design) onto new situations and tasks begins. As a result, two versions of standard design are formed (in the West and in the USSR), and different types of «nonconventional» design (town-planning design, housing design, social, permanent design, etc.) start developing. In this context, as seen from the research, nonconventional design significantly differs from conventional one (Rozin, 2018: 68-109).

In nonconventional design, the designer cannot rely on existing prototypes. He/she is compelled to constitute an object to be designed. To characterize the processes being developed and the conditions defining them, he/she has to conduct researches and formulate concepts of these processes, to form the project implementation environment and strategy. Besides, nonconventional design implies the formation of a number of new kinds of activity (involvement of users in the design process, complex management, expert examination of projects, etc.). I am going to provide one illustration – the development of the Donor Project (Rozin, 2018: 81-109).

Experience of nonconventional social design

This project was launched due to a pressing need to reform the blood banking service realised by all stakeholders (doctors, Ministry of Health, government, NPOs, public). Starting from the 90ies, the number of donors started falling in Russia, having reached by 2007 11 people per 1000 of potential donor population (as compared to 40 people per 1000 in Europe and 60 people in the USA). There are many reasons for that, including outdated equipment of blood transfusion stations, which did not meet modern requirements; donorship lost its high social status, etc. At the same time, it was already impossible, as in the USSR, to force people to donate blood for one compensatory leave and a light breakfast.

The Donor Project had sound financial support; 16 billion roubles were allocated for its implementation. A team of social designers led by two methodologists (Sophia Malyavina and Yulia Gryaznova) was successfully formed. Measures were taken to block attempts of mercenary officials. It was easy to expect that the egoism of Russian officials cannot be blocked by any humanistic reasons (lack of blood in the country is not an argument for officials either). Therefore the team of developers thought over and implemented a number of measures aimed at removing this obstacle (changing the management team, transferring financing to regions, etc.). In general, it is possible to notice that implementation of modern large social projects surely implies thought-over actions blocking the activity of participants of the project or of officials supervising the project attempting to misuse the project. Besides, since Malyavina was an assistant to Tatyana Golikova, Russian Health Minister, from 2007 to 2012, social designers could use an additional resource – an administrative one.

When getting to work on the project, Malyavina and Gryaznova asked a question, what was the major thing that could allow them to work efficiently? The donorship process was most likely only the top of the iceberg. *The taking by a person of the decision to donate blood* was apparently a not less important process. In its turn, this decision depends on many circumstances, both internal and external (understanding donorship, condition of

equipment, etc.). They supposed that there are a lot of donors where donorship exists as a *social institution*. A donor is a social individual and institutional person. He/she solves his/her problems by means of social institutions (which are his/her “social body”). They came to a hypothesis that the object of designing, in this case, is the “institution of donorship,” and as a matter of fact, a new one (since it has to be constructed yet) because the old institution degraded and did not meet its purpose (mission).

Researches of national and western donorship institutions resulted in a mixed model stipulating participation in the donorship of both states and public organizations. Public blood banking service is responsible for the general “blood bank” distributed among medical institutions centrally. The blood banking service is engaged in the collection and preparation of components and attraction of donors. Independent commercial associations help the state at the national and local levels. It is this model that gains development in Russia today. In Europe, a similar system operates in Great Britain.

The next step is the development of the scheme of this institution (*schematic diagram of the institution of donorship*). What does the hypothesis of donorship as a social institution mean? That it is possible to transfer the main characteristics of the institution to the donorship and besides, since it is about the renewal of donorship under new conditions, characteristics of the *formation* of the social institution shall also be taken into account. These characteristics are as follows.

According to Bronisław Malinovsky, it is necessary to distinguish in the institutions the charter (idea), the structure of participants, the standards, the material apparatus, the activity, and the functions. “To represent a sociocultural institution, Anatoly Matiukhin and Vyacheslav Maracha write, i.e., an institution-corporation of the sphere of law, – it is necessary to distinguish the following components of its structure: *the institutional form* (including an institutional **Idea**, a layer of its symbolical attachment and a set of formal sites connected by the procedure(s) – three top elements of the scheme), as well as *the material and spiritual support* (designated on the scheme by letters “**M**” and “**D**” respectively). Institutional supports form a basis of stability of the institution, which enables it to carry out functions of ensuring the stability of society and stabilization of social dynamics. The existence of the spiritual support of the institution means rootedness of the institution in the spirit of the people, traditions, etc., unconditional acceptability of its institutional form from the point of view of “customs” of these people during the given period” (Maracha & Matiukhin, 2006).

The process of formation of the social institution, as the author shows in his book “Formation and specific features of social institutions. Cultural, historical and methodological analysis,” is triggered by “social tension” requesting its discharge, perceived later, at the formation of the social institution, as a challenge, a social problem. This is, if you will, the first structural characteristic of the process of formation of the social institution.

The second characteristic is the *existence of communities or populations interested in the solution of this problem*. These communities create and promote new formations, thereby furthering the emergence of new institutions. As a rule, not one but two-three interested communities take part in forming social institutions.

The next characteristic of the formation process is an *invention of means* (new schemes and procedures), allowing to resolve the problematic situation.

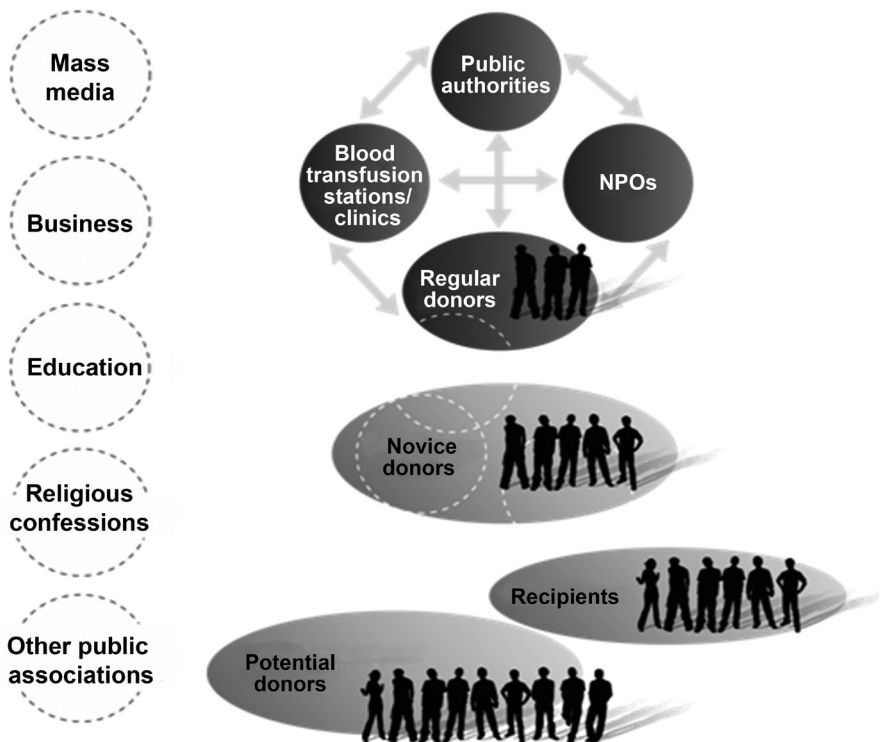
The fourth, and perhaps, the final characteristic of the formation of a new institution is its *understanding and self-description*. It is here that the mission of the new institution is formulated, its characteristic procedures are described, institutional rules are created, and the

interests of institutional communities are discussed in one, or another form.

As an established social entity, an institution carries out certain functions (resolves social problems) and is consistently reproduced. Therefore, an institution is a conscious – to some extent – way of activity, accessible in the sense of development by interested social populations. For this reason, developers emphasized that the decision to donate blood and the real practice of donorship should not be one-time actions.

Actually, the idea of donorship as a social institution was put forward by developers-methodologists (Gryaznova, Malyavina) who were responsible for the content and ideological part of the project. Having come to this hypothesis, they made performed a very important part of the job in terms of defining donorship as *a social design object*. The second part, which they also formulated, is the statement that donorship as a social institution was yet to be created. The question was: by what ideal of the social institution shall we be guided – the one that had been accepted in the USSR or the modern, western one?

Projecting on the donorship the ideas of a social institution and its formation, the developers included the following components in the *schematic diagram of the institution of donorship*: *authorities, blood transfusion stations, public organizations, regular donors*, as well as potential participants of the institution – *novice donors* and *future potential donors*. To understand, what factors can influence the decision-making to donate blood, as well as to include the institution of donorship in the culture (society), *other institutions* were also presented in the schematic diagram, namely, Mass Media, Business, Education, Religious Confessions, various Public (other than the donor) Associations.



Scheme 1.

In fact, this scheme (Scheme 1) set one more concept of a social institution – *an institution within the system of other institutions and within the culture*. So, the three main concepts and schemes of an institution are an institution as an established entity (concepts of Bronislav Malinovsky, Maurice Hauriou, Anatoly Matiukhin and Vyacheslav Marach), an institution as a becoming social entity (Vadim Rozin) and an institution within the system of other institutions and within the culture.

Creation of schemes passes into the “construction” stage, i.e., the stage of creation and detailed design of the social project, including, on the one part, the development of contents of items set in the donorship institution schematic diagram, on the other part, the definition of conditions for the processes of formation of these contents, and on the third part, practical formation of these processes. Previously, it was necessary to conduct a number of researches of these contents and processes.

In theoretical terms, it was necessary to understand, first of all, what real links can exist between basic elements of an institution as a system and what is the contents of these elements, i.e., how a designed scheme may be turned into a real model⁶. For this purpose, two models (prototypes) of the social institution of donorship – the mobilization one and the public one- were compared.

For the first model, the following specific features are characteristic. The whole process from public awareness campaign and recruitment to distribution among recipients is carried out completely by the state represented by ministries and departments. The institution of donorship is regulated legislatively and financed from the budget. The state carries out federal and regional promotion campaigns, plans the activity of all participants, and monitors performance of targets. Such a model has a mobilization character and often is based on ideological or political rationales. Donor activity is maintained by periodic campaigns. The mobilization model existed in the Soviet Union prior to the beginning of the 90ies. Today it is used in China, the United Arab Emirates and some other countries.

Let us now consider the characteristics of the public model. The main donor engagement activity is carried out by public organizations. That forms of such organizations may be the most diverse. However, they are guided by general rules and closely interact among themselves. Such organizations or associations are formed, as a rule, on a territorial basis, or around large medical institutions consuming a lot of donor blood and its components. The state sets the “rules of the game” for public organizations, renders them the necessary assistance at the legislative level. Needs for donor blood and its components are formed “at sites” by clinics and local blood services serving this clinic or several clinics. Procurement plans are agreed upon with local offices of public organizations, which, in turn, provide the required quantity and quality of “donations” (blood donation procedures). The “donor network” is well developed. Donor NPOs understand that they are part of the health system and therefore have to provide this system with blood and its components “when, and in quantities, required.” The NPOs realize their duties with respect to donors, blood services, and the whole social system of the state. Donors realize their obligations towards patients and society. Donors consider blood donation regularity as a guarantee of quality and safety.

The motto of NPOs is to work in partnership with the state, with its support, but independently and without restrictions on the part of the state. The main functions of NPOs include engagement of donors, their training and providing them with information, donorship promotion, organization of blood collection, donor management, information support,

⁶ George Schedrovitsky and one of the authors show that building schemes is only the first step of both knowledge and design. The next steps are aimed at transformation of built schemes into models and projects (Rozin, 2018: 38-48).

cooperation with the blood service in programming (planning) requirements and supporting donors, cooperation with clinics in planning requirements, recruitment and organization of activities of volunteers, development of the system of encouragement and incentivization of donors and volunteers, fundraising. This model is widespread in Europe and successfully functions, for example, in Italy.

The analysis of the existing situation in Russia carried out by the developers of the project showed that currently, the donorship reality is described best of all by the “mixed model” with the participation of both the state and public organizations. The blood service is responsible for the common “blood bank” distributed among medical institutions centrally and without reference to local clinics. The blood service is responsible for collecting and preparing components, as well as for the engagement of donors. NPOs help the state both on the national and the local level. In Europe, a similar system operates in Great Britain. It was a mixed model that was presented in the schematic diagram of the institution of donorship.

The creation of the schematic diagram of the institution of donorship was an achievement of methodologists. They devised, set, as designers would say, *the initial sketch of the social object being designed* (donorship as an institution within the system of other institutions and within the culture), *in which values and ideals of developers, as well as the first characteristics of the future object (donorship system) were embodied*. It was the time of its *construction*, i.e., development and refining⁷. It is worth paying attention that the sketch of the donorship system described characteristics not of an existing earlier and improved system, but of an essentially new system.

The real situation in Russia with donorship was very far from desirable, and the institution existing in the USSR degraded. Therefore, the purpose of both design and management was the *creation of a new donorship institution*, combining the best features of the national and western experience. The analysis of the situation in 2008 showed that basic structural elements of this new donorship institution were either absent or did not fully meet the design requirements. Therefore, creating a new donorship institution was set, and the first steps in this direction were taken. As experience showed, the *process of institutionalization* (formation of a new institution) included two major links: on the one hand, the *institutionalization of a social institution*, and on the other, *self-organization* processes.

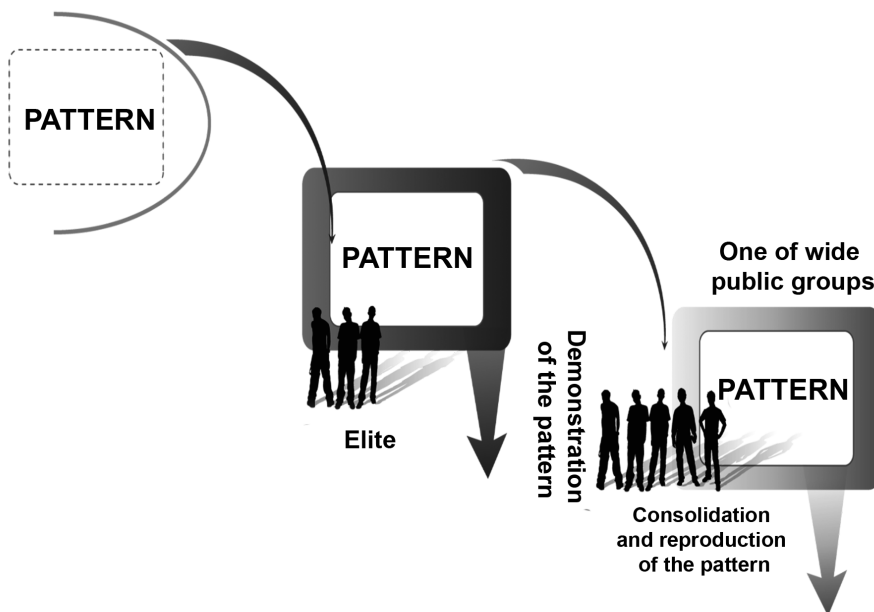
What does the institutionalization of the donorship institution mean? Identification in the process of research and practical formation of the main units of a new institution and relations between them. The matter is that the scheme of the institution of donorship given above is only a scheme and somewhat empty. It should be filled with the contents, real contents, that could be embodied materially. Filling of the scheme begins with the task of defining the contents of its “sites.”⁸ For example, filling of the schematic diagram “site” “Blood Transfusion Station” was elaborated as follows: “*Studying the experience of blood transfusion station works with donors. Integration with blood transfusion stations at the regional level*”; filling of the “site” “regular donors” – as “*Studying motivation of regular donors, meetings. Formalization of motivation*”; filling of “site” “Authorities” – as “*Methodical recommendations: interaction with authorities, a database of contact persons in the regions.*”

⁷ These stages (sketching, development, refining, and at last, implementation) are characteristic especially of conventional design, in nonconventional design the stage of implementation can be only implied.

⁸ Differentiation of “sites” of the structure and their “contents”, as well as other categories of the system-and-structural analysis are discussed in detail in works of Schedrovitsky (Schedrovitsky, 1995: 57-115, 474-481).

The following step is the analysis of contents of the “sites,” which, in its turn, consists of two parts: *research of pre-set phenomena* (studying *experience, motivation*, etc.; often when research has not been mentioned, in fact, it was there) and *assignment of certain actions* (integration, meetings, etc.). It is clear that research makes it possible to gain the knowledge necessary for correct actions, creating new elements and relations of the donorship system.

For example, according to the statistics of the Russian Public Opinion Research Center VCIOM youth expresses the greatest readiness to become donors (16-17 years: 45%; 18-24 years: 43%; 25-34 years: 33%; 35-44 years: 27%; 45-54 years: 22%), and on the basis of this knowledge, the respective recommendations were developed. Another example is a research of one of the mechanisms of social influence making it possible to take decisions (in this case, the decision to donate blood): 1) identification of an institutional pattern; 2) acceptance of this pattern by a narrow, elite group of society which knows what should be done and assumes responsibility for transformations in the face of the rest of the society; 3) transfer of this pattern to another, less elite, but more mass group which consolidates the results of transformations started and ensures self-reproduction of the institution.



Scheme 2. One of the institutionalization mechanisms

On the basis of this research developed, the program and the plan of work with significant social persons (famous statesmen, politicians, artists, TV presenters, etc.) who promoted donorship and often donated blood.

In general, conducted methodological and theoretical applied researches enabled to develop and perform the following measures (actions) in 2008-2009:

- a) detailed informing of the population of Russia about basic social needs satisfied by the donorship institution, its scale, and consequences in case if the donorship institution fails to perform its functions;
- b) formulation and formation of values of the donorship institution (donorship is a norm of life, donorship is useful, a donor is a healthy person, etc.);

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- c) identification of main participants of the donorship institution of, stimulation of their activity;
 - d) creation of communication, interaction, and behaviour standards and rules both within individual social organizations and functions and between them;
 - e) creation of the blood service symbolics and corporate style with which the donorship institution, in general, is associated, holding emblematic actions (All-Russian videoconference, blood service forum, ad hoc actions in the regions);
 - f) formation of communication and interaction of service of blood with other social institutions specified on the donorship schematic diagram;
 - g) organizing conventional actions for the donorship institution. It is worth paying attention to the fact that all these actions were implemented only in those regions where the infrastructure was ready to change (the respective re-equipment of blood transfusion stations had been carried out).

As the development of a social project implies social management, the implementation of the Donor Project included such technologies as *organization, training and adjustment of consciousness*. As it is known, management is an activity connected not only with the organization of the working process (productions broadly defined), but also with people. In the latter case, it is substantially reduced to the *organization, training, and adjustment of consciousness* of specialists and users necessary to the manager. After respective research, all three types of administrative influence were used within the Donor Project. For example, employees of blood transfusion stations and clinics passed training and retraining, and important work was carried out with officials of authorities to create with them a correct attitude to the donorship, organizational work was carried out virtually with all participants of the project.

Self-organization is the second link and side of the process of the creation of a new institution. These are various changes (processes), including reciprocal activity occurring in response to the creation of the social institution (initiated by it). In this case, it is possible to emphasise two important processes: *involvement in the process of formation of donorship of other institutions*, which started to supply actively new donors or to support the initiative, and *expansion of activity of donor groups and communities*. Usually, the formation of a new social institution entails a fight of other institutions against it – a fight for power and “social territory” (expansion of influence upon potential users). But the donorship institution did not compete with other institutions; on the contrary, it turned out to be attractive for them since it enabled them to increase their own social value. In fact, for businesses, mass media, schools, churches, some public associations, participation in the donor activity is considered to be a social and humanitarian service strengthening their own mission. The formation of a new institution also created grounds for the independent activity of donors: they began establishing associations, promoting donorship, communicating in matters relating to donor practice.

And donors themselves turned out to be very active: they created associations, promoted donorship, communicated on issues relating to donor practice. The organizers of the project developed traditional events, such as, for example, “The Day of Donor’s Majority Age”: this day in September second-year students (almost all of them by this time reach the age of 18, and, according to the legislation, they have the right to donate blood) all over the country organized donor campaigns in their higher education institutions. Based on the results of such actions, students became initiators of donorship promotion. Donorship for them became a common good deed with respect to which it was possible to develop real useful and productive activity (not imitating). It appeared to be that many Russians seek

for meaningful social activity, are ready for social service. This, for example, may explain the extensive participation of volunteers in the formation of donorship. Many of them for various reasons, could not become donors, but, nevertheless, volunteers helped to promote and organize blood donation.

The Donor Project may be considered successful; Russians streamed actively into donorship (Rozin, 2018: 104-105). It should be noted that the success of the project was in no small part determined by the participation of methodologists in the social design team. They offered the strategy of solution of the problem and carried out ideological and methodological support of the social project. Therefore it makes sense to characterize the basic principles of their work.

1. Methodological design, research and support made an organic part of the transformation of the current situation and formation of the phenomenon interesting the society.
2. For the purposes of transformation management, two interconnected horizons shall be distinguished: actually *transformations as an artificial plan* and *formation of the phenomenon as a natural plan*. In this context, *transformations and methodological work participate in the formation of this phenomenon*. In this way methodological work and various actions aimed at the creation of the donorship institution made a contribution in the formation of this institution.
3. Specific features and characteristics of the becoming phenomenon (as a whole) are revealed and defined on methodological schemes and subsequently refined and enhanced in the course of implementation of the methodological project.
4. The study of subsystems, units, and relations of the becoming phenomenon revealed on methodological schemes is a prerequisite of refinement and the necessary modification of the methodological project. Another condition is the *formation* of subsystems, units and relations set by methodological schemes, since “natural components” of the becoming phenomenon are constituted in purposeful transformations (training, retraining, communication campaigns, etc.).
5. The efficiency of methodological schemes and the project is conditioned not least by how correctly the social problem is revealed, whether there is a need in the society for the offered changes, and whether methodological management and support are provided.
6. Methodological schemes and knowledge cannot be considered as strict models; their efficiency and conformity to models become clear in the course of implementation of the methodological project. This implementation represents an iterative process during which both the concept, the schemes, and the project are refined and, if required, modified.

In general, the logic of actions within this social technology is governed by the principle which may be called “the principle of change of realities and modalities.” Thus, methodological design and the setting of the whole (in this case, donorship as a social institution) imply “an artificial modality” and a movement within the “project reality.” In their turn, the design and methodological work rely, as it was said above, on researches that means a change of modality (from artificial to the natural one) and a transition to the reality of scientific thinking (more widely, to the reality of knowledge as knowledge can be not only scientific, but also empirical). Formation of missing units and relations of the whole is again a modality of artificial, but the reality this time is different, namely, the reality of

“practical action.” However, since formation – the same as methodological management of the donorship institution formation process in general – make part of this formation and therefore can be studied, in particular, for the purpose of correction of initial schemes, settings and targets so far as the modality of natural and the reality of the becoming whole (donorship institution) exist simultaneously.

It is also worth discussing the axiological side of the whole setting. In this specific case, positive values of restoration of the donorship institution were obvious to all. For patients, it is a hope for saving life and recovering. For doctors, donors' blood is an absolutely necessary means and resource of their professional activity. For donors, blood donation is one of the conditions of realization of their personality and social identification (I help a fellow-being, donate blood for a good cause. Therefore, I feel unity with other people and compatriots, etc.). Finally, donorship as a mass movement is evidence of its consolidation and unification for society.

But much more often, an absolute positive value of envisaged social changes is not evident, but there are various reasons testifying to eventual negative consequences. For example, the same methodological group (Gryaznova and Malyavina) developed in the Ministry of Health and Social Development of the Russian Federation another project, “Healthy Lifestyle.” What may be considered as the whole in this case? Only such behaviour of a person when he/she does not drink, smoke, and take drugs? Obviously, no. Perhaps, then, such behaviour when a person treats the values and the way of life of a technogenic civilization critically, preferring bicycle and rest in a tent to cars and villas? However, how is it possible to live in a society focused on equipment and consumption, ignoring the latter? Or another consideration: things that are good for one, do not fit others, a correct, healthy life for one does not mean the same for another.

Can a methodologist, in this case, decide for others how they should live and what a healthy lifestyle means? We think that no. not only experts but also the main persons concerned shall participate in the setting of the whole within their competence. These are, first, an individual person, secondly, the society in general, thirdly, departments and spheres specializing in health (health system, physical culture and sport, education, etc.). The problem, however, is that all these subjects do not have a coordinated, and often, in general, comprehended (from the point of view of modern challenges and knowledge) understanding of what is “healthy, correct life.”

Health is a supercomplex phenomenon, a contribution made by various social practices, social environment, activity, attitude to the life and health of a person. A new understanding of health is just being established nowadays. Obviously, it cannot be created and built as a building. It can only develop, sprout, but not without our efforts. Components of these efforts include an extensive discussion in the society of health issues, and not only health, but also correct life, as well as sociality, its sense; creation of concepts and on their basis, of disciplines allowing to see health in a new way and to work practically; development of cultural policy promoting formation of a new reality of health consolidating all interesting subjects; training of experts and assistants who would initiate, start and support transformations of the main health practices and conceptualizations.

The solution of all these tasks implies social management and design, individual characteristics we considered here using as an example the successful Donor Project.

Some conditions of development and implementation of space projects

Judging by materials of the mass media and obviously insufficient researches, approximately the same logic of social design was used during the development and

implementation of the American Moon Flight Project (Krichevsky & Bagrov, 2019). It was also necessary to constitute an object of the design, start research processes, and form the implementation environment. This social project was rather difficult, including adopting the political decision, consolidating public forces, concentrating various resources, reforming the rocket industry, and other areas.⁹

Suppose one thinks about why the Russian Moon flight project has not been implemented. In that case, the answer will be the following: first of all, because the USSR as a type of sociality, as a social organism, did not possess sufficient resources (not only material, but also spiritual ones) for the solution of this task. In other words, I want to say that large social projects are not only nonconventional design, but also *sociocultural functioning*. Therefore, the American society and culture developed and implemented the Moon flight project, while the Soviets did not. Realising this, for implementation of major social projects, certain countries combine their efforts as illustrated by examples of projects of creation of planes, rockets, and other big technical systems, and today, development of vaccines against coronavirus.

As a sociocultural functioning, perhaps, it is better to call nonconventional design “social architecture”, understanding that here design launches and involves very different types of activity and spheres (research, various technologies, political decisions, organization and management processes, etc.), which have to be not only co-organised and configured, but which – and that is very important – are conditioned by various sociocultural factors.

Let us think now about what conditions are there to develop and implement space projects. First of all, currently, mankind is not ready to decide seriously to go ahead with the development of such projects, both due to limitation of funds and huge risks for life in space, and reasons of general character (Glenn, 2018; Miller, 2020). Hardly an understanding comes that, without having solved on Earth a number of urgent problems, we may not only fail to master the space, but simply lose our civilization.

Sergey Krichevsky continues general reasons and correctly lists risks that will face a person after leaving our planet (Krichevsky & Bagrov, 2019; Krichevsky & Levchenko, 2021). To transfer the space exploration issue from a fading process into an active and creative one, we probably need a social project within which it shall be necessary to develop at various levels and in various communities a discussion on destinies of our civilization and to convince participants of the discussion that without the development of the space the mankind is doomed. However, it is clear, that even the development of such a project is a difficult task, not to mention its implementation.

Now, what can represent an object of a social space project, or, more exactly, space projects, since space exploration, meaning outlooks of interstellar and intergalactic flights, implies the creation of a system of social projects. Even a person who is not an expert can realise that it is necessary to move cardinally in two to three areas. First, to solve the most complex engineering and technological problems, conducting in parallel most various researches. They shall include the solution of a set of biological and psychological issues, which would allow a man to live in space without, prejudice to his/her health. Secondly, to develop for this purpose on Earth and in space production facilities for manufacturing spacecraft for flights and everything necessary for life on other planets and in space.

⁹ Works under the Apollo Program acquired a nation-wide scale and in terms of mobilization of scientific, industrial and financial resources overpassed the “Manhattan Project” of creations of the atomic bomb. Unlike the latter, the lunar program was not secret that significantly simplified and accelerated performance of works as all participants could exchange freely technical information both in vertical and horizontal plane. Openness of works allowed to exercise their efficient public control, in particular through mass media (Apollo, 2020).

Sacramental question: can these problems be solved in the nearest and even in a more distant future? Are they solvable in general? Would not such social projects be utopian? The Donor Project could be implemented successfully due to creation of a number of unique conditions, and in terms of scale, this project is nothing as compared to space projects. It is asked, what unique conditions need to be provided for the development and implementation of the latter? Would not the solution of such tasks undermine world economy? Any projects, including space projects, may be developed within the framework of nonconventional design, but it is still impossible to think about their implementation suitable for a man.

However, the prospect of the death of mankind either as a result of technogenic accidents or pandemics, or from a casual asteroid or a comet, or due to disappearance of the magnetic field (the number of such forecasts has been multiplied lately) forces to think nevertheless about space exploration.¹⁰ And it is better to think of space projects and work for their promotion, understanding that it is a matter of nonconventional design and social architecture.

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¹⁰ The Universe is a huge place where hidden dangers may be concealed virtually everywhere. Even if you consider just only our solar system, there are threats of asteroids and comets which can destroy our planet in case of a collision. Studying space enables us to determine in advance the location of these dangers to be prepared for the meeting and to save our race.