Abstract. This article contains an attempt at a sociological reconstruction and conceptualization of some of the trends and prospects that were revealed during the pandemic crisis. The empirical basis of the study was a dataset collected as part of a research project devoted to the problems of effective use of human capital in the Khakassia region and the south of the Krasnoyarsk territory. The results required an appeal to a wider array of statistical data, the analysis of which made it possible to formulate some alternative macroeconomic scenarios for the effective use of human capital. The pandemic crisis, taken as a ‘natural experiment’, showed that the Information Technology sector and pre-industrial forms of the economy were the least vulnerable; the rest needed organizational and financial support to maintain survivability. The analysis showed that the movement from an archaic society to a post-industrial one for the overwhelming majority of the population who were forced to work in the service sector was not progress of personal freedom, but, on the contrary, an aggravation of slavery. The most stable and reliable sector unexpectedly was the pre-industrial sector, in which personal economic freedom is not declarative, but genuine. The competition of more developed economic types of society with pre-industrial ones is of an unfair character, accompanied by artificial discrimination, which additionally indicates the natural stability of the latter. In addition, providing employment for the population, an increasingly acute problem of a developed economy, does not pose any difficulties for an archaic one, as employment is always universal here. In this sense, subsistence and small-scale commodity farming is not a dying social rudiment, but a ‘reserve airfield’ to which society can always return during a crisis. Another argument for the prospects of a pre-industrial economic cluster is the ability to resist totalitarian digital control.

Keywords: post-industrialism, human capital, pandemic, social control

1. Introduction

All the popular and scientific and analytical press speaks about the catastrophic impact of the COVID-19 pandemic on the global and domestic economy. Already now, it is possible to summarize the interim results of economic losses by sectors, industries, and structures. For example, in the postindustrial economic structure, the service and entertainment sectors have suffered greatly, but the digital segment of the economy has noticeably increased in weight. The general conclusion for post-industrialism is still...
premature, but taking into account that the IT sector simply did not manage to rob the delivery service everywhere, there is little reason for optimism. The industrial order is suffering considerable damage, and this despite the fact that the greatest funds and resources are now being spent on maintaining industrial production.

Is the pandemic related to the production and efficient use of human capital? Yes. The selectivity of the virus makes it the most dangerous for the older generation, and this is a direct threat to one of the main indicators of the human development index, life expectancy. There is reason to believe that the decisiveness with which the governments, which at first adhered to the COVID dissident ideology (Great Britain, Sweden), changed their position is partly due to the threat of losing the leading position in the eponymous rating [1].

In addition, the pandemic has become a natural test of the vitality, reliability, and prospects of economic systems of various sizes, from national economies as a whole to individual individuals. The regional characteristics of their economic activity provide food for thought.

2. Methodology and Methods

The basis for this study was an array of empirical data collected as part of a research project dedicated to the problems of effective use of human capital in the Khakassia region and the south of the Krasnoyarsk Territory. The population of this territory is approximately 666.2 thousand people. There are no megacities on this territory at all. Abakan, the largest of the cities, has less than 200 thousand people [2]. There are several advanced industrial productions (Sayan aluminum plant, Sayano-Shushensk hydroelectric power station, etc.), but precisely because of the high level of labor productivity, the share of employees of these enterprises in the structure of the region’s labor resources is insignificant. On the contrary, the share of the rural population employed in small-scale industries and farms reaches 40% of the working-age population.

A brief preliminary description of the socio-economic life of the region is given in order to show how backward it is from the point of view of the classical theory of human capital. One of the directions of the comprehensive program of this research is called “Manifestations of economic depression ...”. Within its framework, 63 formalized and 18 expert interviews, as well as observations and polls, were conducted.

The COVID-19 pandemic, it seemed, should have, along with a general deterioration in economic indicators, aggravated the situation with the reproduction of human capital. Therefore, the research team formed a new methodological strategy, according to which
the pandemic acted as a kind of “natural experiment”, during which social institutions, industries and sectors of the economy, and individual organizations were tested for strength and viability. To this end, another essay interview was organized “The impact of the pandemic on social well-being”. Two hundred fourteen thematic essays were collected, the content of which was distributed over 5 analytical tables. This article will touch upon only one, but a very important result of the systematization and interpretation of the material.

It has already been said above that in the framework of the classical theory of human capital, the region under study is a dull sight; by all criteria — life expectancy, quality of education, state of high-tech sectors of the economy, GDP — the region is “lagging behind” against the all-Russian background. Despite the fact that Russia is far from being a world leader.

However, the persuasiveness and efficiency of the classical theory of human capital have long raised doubts in the expert community [3, p. 86]. The macroeconomic scale, disciplinary framework, underestimation of country and regional specifics, and the list of human properties subject to capitalization give reasons for criticism. For example, could not even imagine that such an investment could be female fertility; meanwhile, maternity capital has become not only a theoretical concept but also has been realized in practice. A number of alternative scenarios for human capitalization are also considered in this project.

The empirical data obtained based on the results of the “natural pandemic experiment” make it possible not only to expand the so-called “broad” definition of human capital, but, using the method of extrapolation, to make some adjustments to the paradigm of post-industrialism. More on this below.

3. Results and Discussion

Referring to the damage caused to the economy by the pandemic, the author deliberately did not touch on the segment of the economy, which is usually called pre-industrial. This includes small-scale farming and personal subsidiary plots. Investigating individual loci of economic passionarity — from the author’s point of view, the key component of human capital — the vast majority of such farms was initially perceived as a homeostatic background against which individual “sparks” of human capitalization flare up. However, as it turns out, homeostasis and depression are two different things. The “natural pandemic experiment” showed it in the best way.
As known, economic depression has two sides — objective (economic) and subjective (socio-psychological). Practically no damage was caused by the pandemic on either side of the archaic economy. Objective economic indicators and before that were — from the “industrial” point of view — low. This is partly due to the lack of attention of armchair economists to this sector.

However, here is what is interesting: in the measurements of the social well-being of the representatives of this cluster, no feeling of depression or hopelessness can be found. “And what will we become? The land gives birth, the cows calve ...” (Valery K., farmer); “… But the parents in the village have everything as before, no crises, no unemployment…” (Olga Z., student). If a person is satisfied with his/her position, if he/she is interested not in excess profit, but simply in prosperity, this is no longer depression, but homeostasis. He or she is in balance with the external environment and with him/herself. Increasing productivity here is not an end in itself, but is only welcome if it does not require overstraining one’s own strengths and capabilities of the natural landscape.

The organic filling of the landscape is a factor that continuously intrudes into the problem of human capital when it is necessary to apply it to specific regional conditions. Are high-quality IT specialists needed in the Khakass or Tuvan steppe? Yes, several dozen. There is even a surplus of them, which migrates to large metropolitan areas. Are metallurgical engineers or other certified adherents of industrialism needed here? Yes, several hundred. They are sent here from outside by large companies-employers.

This is a feature of human capital — there is not much of it, and the economy also needs a little. This is a feature of the theory of human capital: the main thing here is not what is said, but what is hidden. Namely: both theory and practical implementation construct a small elite, and the rest of the population is a social slag. What to do with it when the pursuit of efficiency will make the vast majority of the working-age population unemployed? Different proposals are heard. Schwab, for example, taking advantage of the pandemic situation, predicts a totalitarian lockdown, during which a consumer form of ownership will emerge [4]. Shestakova [5, p. 56] comes “to the conclusion about the possibility of an optimistic scenario of harmonizing the relationship between machines and humans in the labor market”, “discovers” reserves in the post-industrial economy that will smooth out the increasingly irreconcilable antagonism of efficiency and employment. However, sociology, even due to its disciplinary specificity, cannot afford to neglect entire social strata and cohorts; not to mention the fact that the emphasis on the pre-industrial cluster of the social order can provide a promising way out of the consumer deadlock, into which post-industrial progress has already driven humanity.
So, the only working option for employment of the “social slag” is the expansion of the service sector. Simply put, those who could not become a programmer go to waiters. Post-industrialism theory describes the service sector in neutral terms or, more often, as an encouraging sign of social progress [6]. However, the content of reflection depends on the point of view; and a look at the situation “from a personal backyard” gives, in the author’s opinion, an interesting picture.

The industrial type of economy involves an emphasis on the production of things, goods in objective terms. In the categories of Marxist economics, a worker who produces a commodity and sells his/her labor power as a commodity is in fact a voluntary “scheduled slave”.

In the post-industrial economy, as applied to the majority, the emphasis from the production of things goes to the production of services. What distinguishes a service from a thing is that it, a service, connects the producer with the consumer, as a rule, directly, and not through the produced thing. In other words, although an industrial worker is a slave, in the labor process he/she does not face the final link in the chain of economic dependence. He/she does not need to demonstrate helpfulness, and this explains the special phenomenon of “worker honor”.

Conversely, for a service worker, servility, or, in the language of the classic factory proletariat, “holuystvo”, is almost the main competence. The waiter can bring a badly or well-cooked carpaccio, but he/she should smile at the client in a friendly (“ingratiating”) manner anyway. Anecdotes, stand-ups, comic scenes regularly ridicule the gloomy Russian service, which is quite understandable: the country has just begun to enter the stage of post-industrialism, and people are not yet accustomed to the fact that now it is not enough just to “push one’s legs apart”, now it is also required to “portray an orgasm”.

It seems that Marx, without suspecting it himself, was right when he argued that the transition from feudalism to capitalism, in alternative terminology — from a pre-industrial society to industrial, is a dialectical return to slavery. Dialectics is a methodologically framed surprise; and it would definitely be a surprise for Marx that the transition to communism (post-industrial society) is accompanied by the aggravation of the signs of hated slavery.

Indeed, postindustrial Euro-America is largely consistent with the description of a communist society. Here national states with their borders and sovereignty are eroded; money in its classical understanding and physical performance has almost disappeared; the freedom of all has really approached the freedom of everyone (again, a surprise, it is unlikely that by “everyone” Marx meant gays and lesbians); technological progress has
turned work into pleasure; finally, the worker is more and more often — not comparable with the 19th century — chooses a business to his/her liking, and not forcibly.

One more paradoxical (dialectical) fact is that, corresponding to the parameters of the communist social system more than the USSR and modern Russia, Europeans categorically reject the term “communism” and use it only for the purpose of problematization (accusations) of Russia or others — note — not modes corresponding to this model.

Comparison of economic types according to the proposed criterion shows that the movement from an archaic society to a postindustrial one for the vast majority of the population is not a progress of personal freedom, as proclaimed, but, on the contrary, an aggravation of slavery.

Another important issue that is directly related to the generation of human capital is the production of the required type of personality. In the coordinate system set by the theory of post-industrial society, the distribution of tasks and functions of the distinguished types of societies is as follows: the pre-industrial type produces the products necessary for elementary survival; industrial type produces goods; postindustrial, in addition to services and information, produces a person with his/her capitalized qualities.

A sober view of things makes it necessary to correct this scheme. First, apart, these types exist only on paper or in the fantasy of a scholastic. In reality, these types coexist and compete. Competition can be fair and dishonest. In fair competition, counterparties play according to the same rules, without using artificial tools of discrimination drawn from outside. An example is the mafia in the United States, which by the way of its economic reproduction is a feudal institution. The industrial cluster was unable to compete with the feudal on equal terms, and therefore applied the entire arsenal of state violence to the mafia.

There are plenty of examples of such "competition" in Russian history and modern reality. The adsorption of labor resources by the industrial sector of the economy in the 1930s was carried out by the methods of collectivization and mass repression. With regard to the current situation, the closure of rural schools and medical and obstetric stations can hardly be attributed to methods of fair competition, if the argument of economic inefficiency is taken on faith. However, there are also egregious examples. In this study, one of the respondents, a resident of a remote taiga village, to which no summer roads were even laid, spoke with undisguised irritation about a raid by the National Guard, during which all hunting weapons and fishing gear were forcibly confiscated from all residents of this village.
Second, the production of certain types of personality takes place in all types of societies. In this regard, any economic system, any economic cluster is a set of conditions that provide advantages to those individuals who are carriers of useful qualities, and filters out carriers of useless or socially dangerous properties. The difference is only in the degree of artificiality or, conversely, the naturalness of reproduction.

In a pre-industrial society, a characteristic social type is reproduced by itself, without any humanistic concepts or disciplinary practices on the part of the state and its institutions [7, p. 78]. In an industrial society, the share of artificiality and, as a consequence, voluntarism in the production of an individual reaches over time extreme degrees. For example, the entire ideology and total practice of the Enlightenment emerged from the intellectual deformation of only 14 members of the editorial board of the Great Encyclopedia. Now the replication and forced installation of any, sometimes the most insane pedagogical theory, generally does without any propaganda — a simple ministerial order and the “Enterprise Standard” introduced into the document circulation of the education system.

In a post-industrial society, the digital revolution is leading to a number of fatal results. The literature has already said enough about the “fourth industrial revolution”, which will replace people with robots everywhere, making them loitering on the streets of megacities. The result, which the author would like to draw attention to, is a multiple increase in the possibility of total digital control. The theory of large numbers says that what has become possible will inevitably come true. It does not matter who exactly is tempted by the prospect of manipulating everyone, the state or the business corporation. The main thing is that one can forget about personal freedom and privacy from this moment. Totalitarianism, which everyone is trying to define politically, actually has a technological explanation.

The only social locus where the ability to live and act freely and uncontrollably remains is precisely the pre-industrial sector. It seems that German Sterligov, leaving the banking sector for the private sector, was guided by precisely these considerations.

“Production of the required personality type” sounds too abstract and has many concretizations, from literal [8] to highly mediated. It is impossible to articulate everything within one article. Briefly, without pretending to completely exhaust the topic, the comparison of types of economies is shown in the table below.

Let us focus in more detail on one such concretization, the most unexpected, namely, applicability to service in law enforcement agencies. Even Xun Tzu said that one has to conquer as many territories as one can hold. The social state — if it is truly social — retains its territories with social programs for the population. However, not a single
TABLE 1: Comparative analysis of types of economy

| Economy Criteria | Pre-industrial | Industrial | Post-industrial |
|------------------|----------------|------------|-----------------|
| Organization scale | Local          | Regional   | Global          |
| Environmental criterion | Balance with the environment | Intensive use | Intensive use |
| The purpose of the labor activity | Insufficiency | Salary, capital | Virtual capital |
| Costs | Not required | Maximum | Sectoral |
| Employment | Overall | Unemployment as an economic constant | Hidden unemployment, turbulent employment |
| Gender (male) | Worker, protector, muscular type | Employee, muscular type | Freelancer, undefined type |
| Gender (female) | “Hearth-keeper”, mother, feminine type | Employee, feminine type | Freelancer, undefined type |
| Capitalization of human qualities | Population | Electoral | Extremely selective |
| Suitability for work in law enforcement agencies | Population | Electoral | Extremely selective |

state dares to limit itself only to this in the hope of loyalty [9, pp. 4–7]. At the moment in the Russian Federation, 2.8% of the working-age population serve in law enforcement agencies, and their funding reaches a third of the national budget. On this basis, service in law enforcement agencies will quite rightly be considered as another formalized version of human capitalization.

However, the specificity of the service is such that it requires staffing with specific human material. These should be carriers of such personal qualities as discipline, willingness to work and the use of violence, fearlessness, duty, and responsibility. What socio-economic cluster reproduces a given personality type?

The answer is on the surface. Even in ancient Rome, they tried to recruit an army from free farmers, whose way of life naturally, by itself and without cost, formed the desired type of soldier’s personality. Conversely, it was strictly forbidden to form legions of lazy, pampered hedonist townspeople.

Now the socio-structural situation has become more complicated, but the basic parameters are still the same. Victories in 1709 at Poltava, in 1812, and in 1945 were won by people from the village. However, in 1956, the number of rural and urban populations became equal, and problems began in the army (and in the “force block” as a whole).

The industrial sector, of course, is also capable of reproducing the “Soldier” personality type, but this requires additional organizational efforts and costs — lessons in labor
and basic military training at school, pioneer organizations. However, as soon as the first signs of post-industrialism appear in a society, even additional costs cannot solve the wave of rolling problems. The transition to 1-year military service was a forced measure, a capitulation in the face of irreversible changes in the “human qualities” of recruits. This is not only expert opinion. The population itself, partly consciously, partly intuitively, feels the need to artificially protect the younger generation from post-industrial socialization. The indicator here is the high, about 30 people per place, competition in closed cadet schools.

4. Conclusions

According to Occam’s razor, one should think simply, but not easier. When asked what kind of people Siberia needs, the simplest answer is “Siberians”. All other sociotypological additions and nuances need more or less additional justification, more or less compulsory and economically costly incorporation into real life [10]. In the scientific article, there is no place for ideological propaganda, including Luddism, Rousseauism, or Anarchism. The author only tried to compare some of the actual trends and identify the most reliable options for the development of the situation. It is already unbearably difficult for the welfare state to be social; employment in the future of the unemployed population in the pre-industrial sector could be carried out without any costs and efforts. However, some timid steps are already being taken — “Garden amnesty”, “Far Eastern hectare”, and the like. The main incentive here, in the author’s opinion, should be the weakening of the controlling administrative attention.

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